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ARTICLES AND NOTES

Book Reviews

(The reviewer's name appears in parentheses after the title of the work.)

Authors

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in which social changes, social attitudes, medical progress, and
variability in the general population have affected the composition
of the population of the mental hospitals

Such trend analyses are possible where there is a series of annual
reports, made in the same or relatively similar form, extending over
a period of years   Such material is available in the Annual Reports
of the Department of Mental Hygiene of the State of New York
from 1913 to 1941 (7), in the Annual Reports of the Department of
Mental Health of Massachusetts between 1917 and 1941 (6), and
the Reports of the Statistician, Department of Public Welfare, State
of Illinois, 1924 to 1940 (5).

Landis and Page (2) and Dayton (1) have presented trend
analyses showing the change in rate of hospitalization with respect
to age, diagnosis, total admissions, resident population, and number
of hospital beds available. These studies indicate that two major
factors have influenced rate of hospitalization; namely, the number
of available beds and the shift in the average age of the general
population which has been accompanied by a change in the attitude
of the general population toward the care of the aged   Generally
speaking, in spite of the increase in the number of hospital beds
available per 100,000 of the general population and in the rate of
hospitalization of the aged, there has been no major increase or
decrease in the rate of first-admission to mental hospitals. These
relationships are shown in Figure 1 (3).

Annual tabular reports are available for New York, Massachusetts,

3

and Illinois giving the average or median age at first-admission to
a mental hospital for all patients and for patients by each diagnostic
category   Also, records are available showing the average or median
age at death for all patients who died in the mental hospitals and
for patients by diagnosis   Finally, we have records giving the
average or median number of years of residence in the mental
hospitals for all patients and for patients by diagnosis, of those who
died in the mental hospitals

Analysis of these three trends is of interest in that it shows the
influence and effectiveness of medical therapy and of better cus-
todial care in the hospitals   In another sense, such an analysis is
an indication of what might be called "rate of hospital failures"
since those who died in the hospitals presumably were not cured or
could not be cured by present-day therapeutic procedures   One
must be cautious in interpretations, however, since the average age
at first-admission to the hospital, and hence the length of hospital
residence before dying, is a function of the average age of the
general population from which the mental hospital group is drawn
Furthermore, custodial care and therapeutic effectiveness are directly
related to overcrowding of the hospitals or number of hospital beds
available
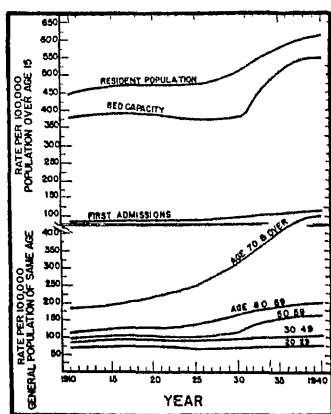
FIG ▸   TREND ANALYSIS OF MENTAL HOSPITAL CAPACITY, RESIDENT POPULATION,
FIRST-ADMISSIONS, AND ADMISSIONS BY AGE TO THE NEW
YORK STATE MENTAL HOSPITALS, 1910–1940

We shall present a trend analysis of the average age at first-
admission, average age at death of those who died in the hospitals,
and average years of hospital life for those who died in the mental

hospitals, based on the reports from New York, Massachusetts, and Illinois These analyses will be presented for all patients and for each of the major diagnostic categories, namely dementia praecox, manic-depressive psychosis, cerebral arteriosclerosis, senile dementia, general paresis, alcoholic psychoses, and involutional melancholia "All psychoses" include not only the above diagnoses but also all other patients who entered, lived, and died in mental hospitals during the periods in question.

As we have stated, the New York tabulations are available for the years 1913 to 1941, inclusive, the Massachusetts figures for 1917 to 1941, and Illinois figures for 1924 to 1940 Throughout the period the New York figures have been presented in a consistent fashion, whereas those for Massachusetts and Illinois have not. Furthermore, the New York figures are based on many more cases in every instance than those of Massachusetts or Illinois. On the basis of these considerations we have based our report principally on the New York figures and will present the Massachusetts and Illinois data only as they appear to substantiate or contradict the New York trends   Stated in another way, we will use the Massachusetts and Illinois data only to indicate the degree of certainty which we may attach to the New York State trends

Figure 2 [1] shows the average age at death, average years in the hospital at death, and median age at first-admission for all psychoses,
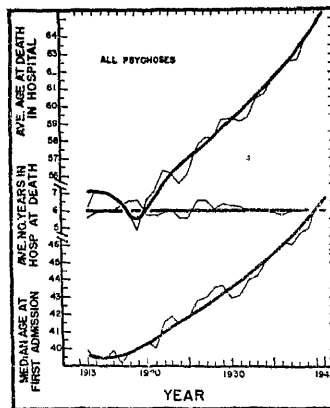
FIG 2   TREND ANALYSIS OF AVERAGE AGE AT DEATH, AVERAGE YEARS IN THE HOSPITAL AT DEATH, AND MEDIAN AGE AT FIRST-ADMISSION FOR ALL PSYCHOSES IN NEW YORK STATE HOSPITALS, 1913–1941

[1] In Figures 2 through 9, the heavily drawn curves are the trend lines of best fit   The actual trend is shown by the thin lines which follow the heavy curves

based on the New York figures between 1913 and 1941 inclusive
The median age at first-admission has increased at a fairly constant
rate from its 1913 level of 39 9 to 48 8 in 1941   Analysis of the same
data by sex showed no difference in the trend, although the median
admission age was greater for the females for every year under
consideration   This curve is based on an average of 8862 cases per
year   The Massachusetts figures, which are based on a yearly
average of 3403 cases, show essentially the same trend, in that they
start in 1917 at 39 0 and rise to 48 2 in 1941   The rate of increase in
Massachusetts is more rapid between 1917 and 1927 than in New
York, and less pronounced after 1928

The significance of this rise in admission age was pointed out
by Dayton (1) who compared the average age of admission to
mental hospitals with the average age of the general population of
Massachusetts and found that the average age at first-admission
was increasing more rapidly than the average age of the general
population. This change in the average age of the population does
not influence the age of admission directly in our treatment of this
data since we have made use of the absolute figures rather than
rate per 100,000 of parallel age groups in the general population.
The change in the age distribution of the population cannot alone
account for this increase, although it is undoubtedly an important
contributing factor   Other factors operative are the positive decrease
in the number of foreign-born, out-patient mental hygiene clinics,
psychiatric wards in the general hospitals which care for psychiatric
illnesses of short duration, and, possibly, the increase in the general
physical health and stamina of the population at large.

The top curve in Figure 2, that of the average age at death of
those who died in the hospital, has risen sharply since 1913, with the
exception of the drop for the years 1918, 1919, and 1920   This drop
is probably due to the influenza epidemic of 1918–1919 which took
its greatest toll in the age group 25–45, so decreasing the average
age at death in the mental hospitals as well as in the general popu-
lation   With this one reversal, the age at death has shown a steady
increase from 54 0 in 1913 to 65 4 in 1941, a change of more than
11 years. The Massachusetts trend is quite similar, although the
average age at death has been consistently higher, its rise being from
57 8 to 68.0.

The middle curve in Figure 2, that for the average number of
years resident in the hospital at death, shows very little variation

over the 29 years studied, the trend being best represented by a straight line drawn at six years of residence, which is the average The constancy of this curve is due largely to the fact that it is the arithmetic difference between age at admission and age at death [2]

Dementia Praecox

Dementia praecox is undoubtedly the most important single diagnostic category among the mental diseases, for not only do 20 per cent of first-admissions come from this group, but 45 per cent of the resident population of mental hospitals are so diagnosed   The age trends in this psychosis can be seen in Figure 3

As Figure 3 shows, the trend for the median age of first-admission for dementia praecox has reversed itself. The median age increased from 28 8 in 1913 to 33 4 in 1927, and between 1928 and 1941 it has decreased to 30 4. The Massachusetts trend has the same shape, the

Fig 3   Trend Analysis of Average Age at Death, Average Years in the Hospital at Death, and Median Age at First-Admission for DEMENTIA PRAECOX in New York State Hospitals, 1913–1941, Massachusetts State Hospitals, 1917–1941, and Illinois State Hospitals, 1926–1940

reversal occurring in 1934   The Illinois curve, starting in 1924, has the same shape.   There is no clear, direct explanation for this reversal in trend.   It runs contrary to "all psychoses" and to the trend followed by every other major diagnostic group except involu-

[2] It must be kept in mind, however, that only a limited percentage of those who are admitted to mental hospitals end their lives there, and that our admission age trend is for *all* first-admissions

tional melancholia   Among the various hypotheses which might be considered are the following (1) Change in medical diagnostic criteria, so that more of the younger patients are now classified as dementia praecox, whereas older ones are called manic-depressive   Why this change should take place so definitely and abruptly about 1928 is hard to understand   (2) The expansion of hospital facilities in New York State started in 1930   With more hospital beds available more younger dementia praecox patients might be admitted, but it is hard to believe that this should be true only of dementia praecox. (3) The use of various shock therapies (insulin, metrazol, etc) began in the early '30's, and this may have brought more younger patients to the hospitals   Actually, the use of this variety of therapy started on a large scale only after 1935, which is at least five years after the reversal of the trend

Dementia praecox patients are dying nearly seven years older at present than they did in 1913   The trend line here is a relatively constant rise, except for a pronounced drop in 1918 and 1919, due directly to the influenza epidemic   Between 1929 and 1938 the increase was gradual, but since 1938 it has accelerated   This trend is corroborated by the figures for Massachusetts and Illinois, which show exactly the same trend, but with a steeper rise

The fluctuations in the trend for years of hospital residence at death closely parallel those for the age at death, except that the trend line shows a more gradual slope   Dementia praecox patients who died in the New York State hospitals in 1941 had lived there only 3 7 years longer than those dying in 1913, a residence of 18 6 years compared to 14 9   The Massachusetts and Illinois curves, like that for New York, are directly related to the trend for age at death.

MANIC-DEPRESSIVE PSYCHOSIS

Manic-depressive psychosis is probably next in importance to dementia praecox   Trends for this psychosis can be seen in Figure 4

The median age at first-admission for manic-depressive patients has increased 8 6 years since 1913, rising steadily from 29 9 to 37.6, but with somewhat of a deceleration in this upward trend beginning in 1935. In Massachusetts the median age at first-admission in 1917 was 39 8, following which there has been an irregularly declining trend to the 1941 median of 36.6 (the same median—or nearly so— as in New York in 1941)   The Massachusetts curve is based on

8279 total cases between 1917 and 1941, an average annual number of 360 cases   The Illinois trend curve, 1926-1940, based on a total of 3939 cases (average annual intake 303) is, like Massachusetts, an irregularly declining one   The median age has declined from

FIG 4   TREND ANALYSIS OF AVERAGE AGE AT DEATH, AVERAGE YEARS IN THE HOSPITAL AT DEATH, AND MEDIAN AGE AT FIRST-ADMISSION FOR MANIC-DEPRESSIVE PSYCHOSIS IN NEW YORK STATE HOSPITALS, 1913–1941, MASSACHUSETTS STATE HOSPITALS, 1917–1941, AND ILLINOIS STATE HOSPITALS, 1924–1940

(The scale of the Massachusetts and Illinois trend curves for First-Admission has been displaced five years downward—from 40–36 to 35–31—in comparison to the New York curve, and the curve for Years in the Hospital one year downward—from 8–5 to 7–4—on this particular graph in order to make the visual comparison of the trends more apparent)

38 8 in 1926 to 37 4 in 1940.   Since the New York trend is based on an annual number of cases that is three times greater [3] than either Massachusetts or Illinois and since the deviation around the trend line is much smaller, we believe that there has been a true increase in the age at first hospitalization for manic-depressives, but both the Massachusetts and Illinois figures counsel caution in interpretation   In general, we believe that the increasing age is to be attributed to the stoppage of foreign immigration, psychiatric wards in general hospitals, and out-patient mental hygiene clinics

The average age of death of manic-depressive patients has also increased since 1913, from 47.7 to 56 7—a nine-year increment   The rise was very gradual until 1933 when it started to climb rapidly

[3] The total number of first-admission cases in New York, 1917–1941, was 25,177, with an average annual intake of 1,095

Again there is only slight agreement with the Massachusetts data which show a parallel rise after 1933, but before that, no concurrence at all in trend, the Massachusetts figures being very irregular The Illinois trend, 1924–1940, is, presumably, one of increasing age, but not nearly so pronounced as New York, the average in 1924 being 54 8 and the median in 1940, 56 8

The trend for years of hospital residence of those dying in the hospital shows that these patients are now resident nearly twice as long as they were in 1913, the rate of increase being almost parallel to that for dementia praecox, though the gain since 1933 is greater in this group The average manic-depressive patient who died in the hospital in 1913 had lived there 4 8 years, the average manic-depressive dying in 1941 had been resident for 8 8 years. In this curve, both the Massachusetts and Illinois trends parallel that of New York

So far as the New York State figures go, we believe that the longer hospital life is, for the most part, a reflection of the increase in hospital facilities (number of hospital beds available) The overcrowding and poorer facilities for care which existed up to 1930 evidently shortened the life span as well as the number of years of residence of manic-depressive patients

CEREBRAL ARTERIOSCLEROSIS

During the five-year period from 1916 to 1920, the average number of first-admissions for this psychosis was 393 annually in the New York State hospitals; for 1937–1941 it was 2520 annually, which is more than a five-fold increase This increase is a real and positive one, since more than two-thirds of all patients over age 60 are diagnosed as either cerebral arteriosclerosis or senile dementia (As we shall see, senile dementia showed an increase amounting to 125 per cent) Neither cerebral arteriosclerosis nor senile dementia are such vital hospital problems, since, as Figures 5 and 6 indicate, their average hospital life is from one to two and a half years. Both are regarded, save in rare instances, as terminal diseases from which no recovery is to be expected

The age at first-admission, as shown in the bottom curve of Figure 5, has steadily increased, so that patients of this variety who entered the hospital in 1917 at a median age of 63.1 were admitted for the first time in 1941 at a median age of 67 5.

The age at death in the hospital of the cerebral arteriosclerotic patients has also been increasing This increase has been constant from the 1917 average age at death of 64 5 to the 1941 figure of 70 0 In Massachusetts the trend was again toward an older age at death, showing a curve almost the replica of the Massachusetts curve for median age at first-admission
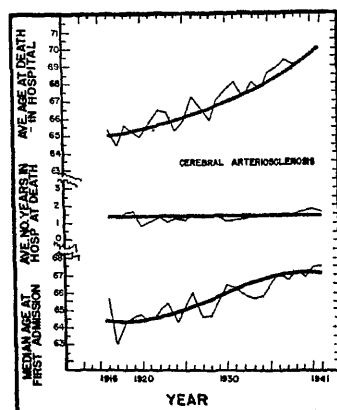
FIG 5   TREND ANALYSIS OF AVERAGE AGE AT DEATH, AVERAGE YEARS IN THE HOSPITAL AT DEATH, AND MEDIAN AGE AT FIRST-ADMISSION FOR CEREBRAL ARTERIOSCLEROSIS IN NEW YORK STATE HOSPITALS, 1916–1941

The average number of years of hospital residence has not changed significantly since 1917 but has stayed close to 15 years, so apparently the increasing ages both of first-admissions and of death have kept in the same relation over the course of the years The Massachusetts data show the same trend, the average years of residence being 15 with only minor fluctuations from year to year

SENILE DEMENTIA

Since 1913, senile dementia patients (first-admissions) have entered the New York mental hospitals at an age that has gradually and steadily risen from its 1913 median level of 73.3 to 76 4 in 1941 This rise in median age at first-admission is particularly evident in the years after 1926 The curve for Massachusetts shows a similar trend and a comparable age range.

The average age at death for patients in the senile category has increased in a fashion similar to the median age at first-admission, gradually at first, then more rapidly after 1926 From 74 years, the

average death age in 1913, the trend has mounted steadily to a 1941 average of 78 1   This trend is shown also by the Massachusetts and the Illinois data
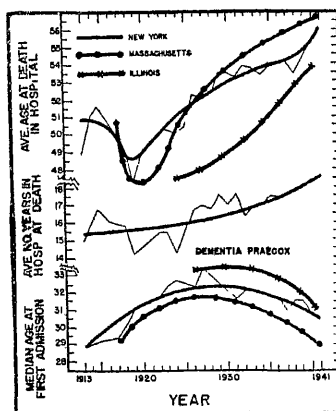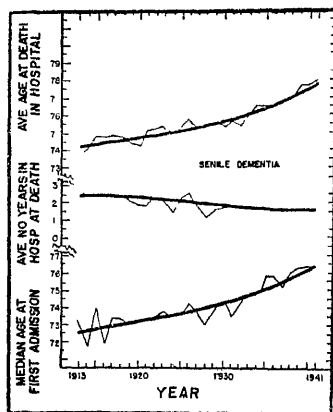

FIG 6   TREND ANALYSIS OF AVERAGE AGE AT DEATH, AVERAGE YEARS IN THF HOSPITAL AT DEATH, AND MEDIAN AGE AT FIRST-ADMISSION FOR SENILE DEMENTIA IN NEW YORK STATE HOSPITALS, 1913–1941

Although the curves for admission and death ages parallel each other fairly closely, the average years of hospital residence have decreased from 2 9 years in 1913 to 1 6 years in 1941   This same trend and very similar figures are found also in Massachusetts and Illinois

GENERAL PARESIS

For the five-year period from 1913 to 1917, the average annual number of patients with general paresis admitted to the New York State mental hospitals was 772; for 1937 to 1941, the annual average was 906, an increase of 17 per cent   (The rate per 100,000 of the general population, however, decreased)   The age trends for this psychosis can be seen in Figure 7

The median age at first-admission for general paresis has increased 3 4 years since 1913, when the median age at first-admission was 42 1, as compared to the 1941 median of 45 5   A similar trend is found in Massachusetts and Illinois

The rise in average age at death in this group is quite marked, rising steadily from the 1913 average of 44 8 to the 1941 average level of 52.4, the trend rising most sharply after 1921   The same

tendency is found in Massachusetts, where the death age rose from 46 2 to 51 4, the curve being more steeply inclined after 1921.

The average number of years in the hospital at death for patients with general paresis has increased very gradually from their 1913
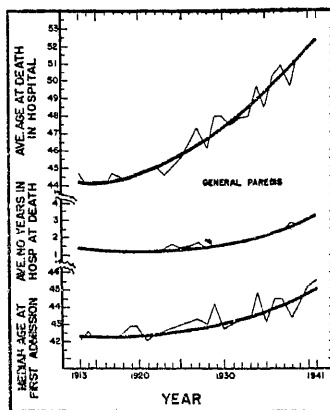
FIG 7   TREND ANALYSIS OF AVERAGE AGE AT DEATH, AVERAGE YEARS IN THE HOSPITAL AT DEATH, AND MEDIAN AGE AT FIRST-ADMISSION FOR GENERAL PARESIS IN NEW YORK STATE HOSPITALS, 1913–1941

level of 1 4 years to the 1941 average of 3 3, the increase being very consistent, and having only minor fluctuations from year to year The trend in Massachusetts and Illinois is the same

ALCOHOLIC PSYCHOSES

The alcoholic psychoses constitute 5 per cent (1938) of first-admissions to the mental hospitals of the entire United States, although this percentage varies rather widely from year to year In 1938 for all the United States mental hospitals, the alcoholic psychotics constituted 3 per cent of the resident population The trends for the alcoholic psychoses can be seen in Figure 8

All three trend lines for the alcoholic group are much more irregular than those for any other psychosis This is true for New York, Massachusetts, and Illinois This irregularity is due in part to the effect of national prohibition, in part to the wide variation in the number of cases (in New York, 122 cases in 1920, 877 cases in 1937), in part to the greater variability in the number of women admitted, but probably for the most part due to the change in social attitudes, law enforcement, and the like—in other words, to a truly variable social pressure

In New York the median age at first-admission rose, in general, between 1913 and 1921, then fell sharply until 1924, rose gradually until 1933, and has fallen slightly since that date. For the most part, this trend was the same in New York, Massachusetts, and Illinois The trend line (New York) is similar for both men and women.
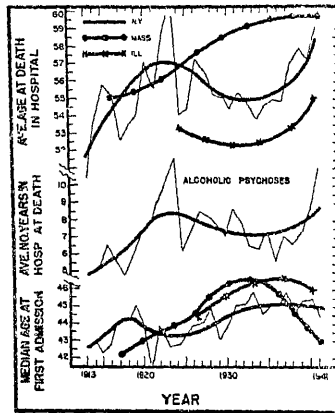
FIG 8   TREND ANALYSIS OF AVERAGE AGE AT DEATH, AVERAGE YEARS IN
THE HOSPITAL AT DEATH, AND MEDIAN AGE AT FIRST-ADMISSION FOR
ALCOHOLIC PSYCHOSES IN NEW YORK STATE HOSPITALS,
1913–1941, MASSACHUSETTS STATE HOSPITALS, 1917–1941,
AND ILLINOIS STATE HOSPITALS, 1924–1940

The average age at death in the hospitals (New York) increased between 1913 and 1920, probably because of the decreasing number of new patients entering the hospitals The age fell between 1921 and 1934, and since that time has increased sharply. The trend curve for the average number of years in the hospital closely parallels that for the average age at death. All three trend curves for Massachusetts and Illinois are, as in New York, very irregular, but if trends do exist the Massachusetts and Illinois curves may be said to confirm those of New York.

INVOLUTIONAL MELANCHOLIA

Involutional melancholia ranks seventh among the major psychoses in the number of first-admissions and in resident population in our mental hospitals It occurs among women much more frequently than among men, the male to female ratio being 1 to 2 2 The trend lines for this diagnostic group are found in Figure 9

Unlike all of the other major psychoses, the median age at first-admission to New York hospitals for the involutionals has shown a constant, though gradual, decline   In 1913 the median admission
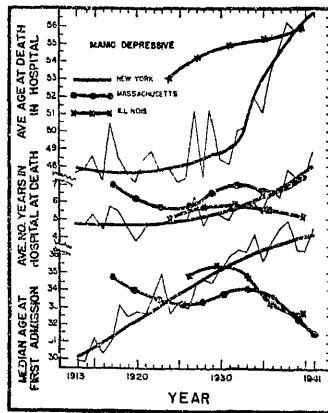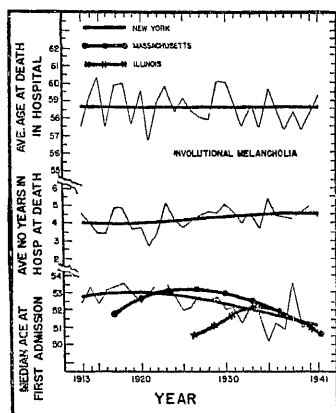
FIG 9   TREND ANALYSIS OF AVERAGE AGE AT DEATH, AVERAGE YEARS IN THE HOSPITAL AT DEATH, AND MEDIAN AGE AT FIRST-ADMISSION FOR INVOLUTIONAL MELANCHOLIA IN NEW YORK STATE HOSPITALS, 1913–1941, MASSACHUSETTS STATE HOSPITALS, 1917–1941, AND ILLINOIS STATE HOSPITALS, 1926–1940

age was 52 4, and in 1941 it had gone down to 51 0, a drop of nearly two and a half years   A similar net decline is found in the Massachusetts data, where, between 1917 and 1941, the median age at first-admission dropped from 52 7 to 50 9   The trend itself has declined in Massachusetts since 1924 and in Illinois since 1934

In New York the average age at death has varied considerably from year to year, but has shown no actual trend either upward or downward, remaining somewhere near its central tendency of 58 7 years   In Massachusetts the trend has been a slight increase in the death age, progressing from 57 4 in 1917 to 59 0 in 1941   In Illinois there has been an increasing trend from 54 8 in 1924 to 57 0 in 1938

The length of hospital residence in New York has shown some upward tendency—from about four years to four and a half—females having longer periods of residence than males   This slight increase in the years of residence would be expected from the other two trends, for, if there is no significant difference in the age at death and a progressively earlier admission age, some increase in length of residence would be the arithmetic result   In Massachu-

setts and Illinois the variability in annual average has been very wide so that the trend lines are uncertain

MEDIAN AGE AT FIRST-ADMISSION

The lower set of curves in Figure 1 indicates how the trend for age at first-admission, per 100,000 of like population, has been increasing ever since 1910, and especially since 1917 As Figure 2 shows, this is reflected in the increasing median age at first-admission for "all psychoses" Since the seven major psychoses whose trends are shown in Figures 3 through 9 make up about 80 per cent of "all psychoses," the explanation for the tendency shown by the curves for the total group can be found mainly in the additive effect of those diagnostic categories

The trend for admission age has been steadily rising in all psychoses except for involutional melancholia, dementia praecox, and the alcoholic psychoses The curve for involutional melancholia has declined gradually since 1923 and that for dementia praecox since 1927 The general direction of the alcoholic trend line is upward but its rise has been irregular The increase in the curve for "all psychoses" until 1927 depends mainly on the rise in admission age for dementia praecox and the manic-depressive with smaller contributions from cerebral arteriosclerosis, senile dementia and general paresis After 1927, when the dementia praecox trend curve starts a downward swing, the admission ages for senile dementia, cerebral arteriosclerosis, general paresis and the alcoholic psychoses began to rise more sharply while that for manic-depressive continued its climb The fact that the curve for the total does not reflect the effect of the decrease shown in the dementia praecox curve must depend on the added acceleration of the other curves plus the effect of the 20 per cent of patients belonging to minor diagnostic categories

Just why the dementia praecox curve does not continue to rise with the general trend is, as we have pointed out earlier, hard to explain The decline in the median age of the involutional melancholia patients is more clear-cut, and most probably due to the clarification of diagnoses Since 1930 the differential diagnosis between involutional melancholia and manic-depressive, depressed type, has been clarified so that more of the older manic-depressive, depressed, are being diagnosed as involutional melancholia The

effect on the manic-depressive curve can be seen in the deceleration in the trend of median admission age after 1930

We made a separate trend analysis of the New York and Massachusetts data for each diagnostic grouping for males and for females In no instance did the trend lines with respect to sex contradict each other The median age at first-admission is higher for females than for males in senile dementia (1 1 years) and dementia praecox (4 9 years), for males it is higher than females in cerebral arteriosclerosis (1 0 years), general paresis (1 2 years), alcoholic psychoses (0 6 years), manic-depressive (1 9 years), and involutional melancholia (3 5 years)

Average Age at Death

The average age at death for "all psychoses" (Figure 2) has followed an upward trend nearly parallel to that of the age at admission. The curves for the different diagnostic categories all tend in an upward direction with one exception, namely, involutional melancholia, where there has been no significant change The curve for the average age at death for all psychoses clearly depends to a large extent on that for dementia praecox (probably about 50 per cent), for it follows the great drop in 1919 brought about by the influenza epidemic Furthermore, the decrease in the years between 1915 and 1919, a phenomenon found only in the dementia praecox curve, is reflected in the curve for "all psychoses " There is no obvious reason for this decline before 1919

The analysis of the trend data with respect to sex showed that the curves followed the same course separated only by a relatively constant number of years Women diagnosed as senile dementia and as dementia praecox died at an older age than men, in all other disease groups the men were older at death than the women

Average Years in the Hospital

For "all psychoses" the average years of hospital residence at the time of death in the hospital has not changed significantly over the period studied This is to be expected in view of the constant relation between the rising trends for admission and death ages. Likewise, the hospital residence curves for each of the seven individual psychoses can be seen to be the result of the effect of the other two curves.

In general, all trends for hospital residence are showing an

increased age effect except for that of senile dementia which has declined somewhat, and that of cerebral arteriosclerosis which has remained constant These two diagnostic categories which account for 20 per cent of first-admissions and 8 per cent of the resident population do not furnish enough weight to alter the accelerating trend for "all psychoses," especially in view of the effect of the marked rise in the curves for dementia praecox and manic-depressive psychosis.

When the trends for male and for female are established separately they run closely parallel courses and in no diagnostic group is the average number of years resident at death greater than 0 7 years when the average of the 29 years is taken

INFLUENCE OF MEDICAL, BIOLOGICAL, AND SOCIAL FACTORS ON TRENDS

Medical and Custodial Factors

It is of interest to explore systematically the various factors which have been shown, or have been thought, to influence the trends of hospitalization for mental disease   All previous investigations, as well as this study, show that better medical and custodial care, and the increase in the age of the general population are the most potent factors influencing all mental disease trends   As Figure 1 shows, there has been a marked increase in the number of hospital beds available for the mentally ill of New York State   Going with this has been an increase in both the number and quality of the medical and nursing personnel and in the general type of custodial care afforded mental patients. Better hospital and medical facilities should act to bring mental patients into the hospitals at an earlier period of their lives. This assumption seems logical since we believe that the family of a patient would be more willing to make use of good hospital facilities and less apprehensive of the type of care their relative would receive when and if better hospitals are available   This effect has probably been negated by the marked increase in the number of hospital beds available in the psychiatric wards of general hospitals and in the number and use of mental hygiene out-patient clinics   The early, less severe mental disabilities are, in all probability, now handled either through the out-patient clinic or through the general hospital, so appreciably delaying the admissions to State mental hospitals. Undoubtedly this has affected the

age at first-admission for practically all types of patients, with the possible exception of the seniles and arteriosclerotics

Better therapeutic procedures and more clear-cut diagnostic standards have also influenced the trends which we have studied The use of the various fever therapies in general paresis, shock therapies in dementia praecox and involutional melancholia, and vitamin therapy in the alcoholic psychoses have prolonged the life of many patients even though the therapy has not brought about a complete social recovery which would lead to a discharge from the hospital. The application of these therapeutic procedures depends upon fairly accurate medical diagnosis.

In addition, the standardization in diagnosis, although it has no effect on the age at admission, does affect the statistical reporting with respect to age at death and years in the hospital As we have pointed out previously, the standardization and classification of the difference between manic-depressive psychosis and involutional melancholia show a real difference in the direction of these two trend curves

The effect of better hospital and medical care has been to prolong the lives of the patients in the mental hospitals and to increase the number of years that they stay in the hospital This is clearly shown by all of our curves It should be pointed out that we have no direct evidence here of the effect of this increased medical efficiency so far as the "recovered" case that is discharged into the community is concerned. Other studies [Malzburg (4); Landis and Page (2)] have shown that the expected life span of the "recovered" mental patient is considerably shortened There is no evidence to show that this decrease in life expectancy is due to any of the medical procedures which act in the recovery of the patient

Biological Factors

The increase in the life span of the American population, and with it the average age increase of the general population is a phenomenon which has, and will have, marked influence on the entire social and political structure of the United States This influence is reflected in the analysis of the trends which we have presented here It is shown in the median age of first-admission to the mental hospitals It does not affect, except indirectly, the average age at death except for the old-age psychoses This increase in the average

age of the general population is attributable to the improved general health of the population. This better general health is in turn the result, in part, of better nutrition, accident prevention, better housing, etc, but mainly of preventative medicine, viz, immunization against typhoid, diphtheria, and small-pox, decreased mortality from appendicitis, etc An older general population will contribute an older median age group to the general hospitals regardless of diagnosis

The sharp increase in the death rate due to the influenza epidemic which occurred in the fall and winter of 1918 and 1919 is reflected in the curves presented in this study This epidemic resulted in a disproportionate number of fatalities in the population aged between 20 and 45, hence influencing the dementia praecox data most markedly It has probably also affected all other curves for some years following 1918, since conceivably many individuals who might later have developed one or another mental disease died in the epidemic.

Social and Environmental Factors

All previous investigations in this field have indicated that immigration, either from a foreign country or between different states in this country, is reflected in the mental disease rates Immigrants, whether foreign-born or born in other states of the union, consistently show higher admission rates to our mental hospitals than do the native-born of the same state The selective immigration laws of 1924 shut off the bulk of foreign immigration to the United States so that the problem of the foreign-born and their admission to our mental hospitals now shows itself only as part of the increasing age of the general population Foreign-born who are aged are contributing more than their share to those who enter our mental hospitals at all ages, but particularly after age 60 This trend has, in part, been complicated by the immigration into New York by Negroes from the southern states This immigration trend has been one in•which persons over age 20 and a disproportionate number of males came into New York State. The Negro-white ratio of admission to the New York State mental hospitals is 2 3 to 1 This is further complicated by the fact that both the foreign-born and the Negro immigration has been to the cities rather than to rural

areas Increased urbanization has always been shown to be reflected in an increased rate in mental hospitalization Circumstances of urban existence do not lend themselves to home or family care We have, then, a complicated interrelationship of age, immigration, and urbanization, all of which have led to an increase in the median age at first-admission They have also affected the average age at death in the hospital since the aged, the immigrant, and the city dweller tend to remain in the hospital, even though some improvement in their mental status may take place, since our cities are not designed as adequate living places for those who are mentally disabled

World War I may have been one of the factors which, together with influenza, led to the decreasing median age at first-admission between 1916 and 1919 Physical examinations, work in war industries, etc, would lead to greater efficiency in spotting mental patients in the general population, and possibly to their hospitalization The taking-out of the general population of a large number of young men who were drafted into the military forces might also have affected this tendency in a negative fashion There is, however, no clear-cut evidence that World War I directly influenced any one of the three trends which we have studied

The economic depression of the '30's did not influence the trends, since, with the exception of that for dementia praecox,[4] they all proceed in the same direction which they had assumed before 1930. One might reasonably expect that the average age of death in the hospital would increase during the depression since economic circumstances were such that it was necessary to keep in the hospital many individuals who had made a partial recovery but who could not be discharged since there was no way for them to support themselves or be supported during "hard times" This may have accelerated these increases, but the curves themselves fail to show such acceleration

The national prohibition which existed between 1918 and 1933 was effective only with respect to the alcoholic psychoses We have previously commented upon the irregularity of these trends

[4] The reversal from an increasing age to a younger age at first-admission for the dementia praecox group took place in 1926 for New York, 1934 for Massachusetts, and 1931 for Illinois

SUMMARY

An analysis of the trends of median age at first-admission, average number of years spent in the hospital by those who died in the hospital, and average age at death of those who died in the hospital has been presented for the New York State Mental Hospitals, 1913–1941 Similar trends have been worked out and compared for the Commonwealth of Massachusetts, 1917–1941, and the State of Illinois, 1924–1940 This analysis has demonstrated the following points

1. The median age at first-admission has increased markedly for all psychoses and for each of the separate diagnoses with the exception of dementia praecox and involutional melancholia The trend for dementia praecox showed an increasing age until about 1926 and since that time a decreasing age No explanation of this change, which is shown for New York, Massachusetts, and Illinois, is apparent The decrease in the median age of the involutional melancholic is probably due to the better differential diagnosis between this condition and manic-depressive, depressed The trend for the alcoholic psychoses has been most irregular and probably reflects the influence of national prohibition as well as changes in law, social attitude, etc

2 The average age at death of those who died in the mental hospitals has increased considerably, 1913–1941. This increase is attributed to the increase in age at first-admission, better hospital care, better medical therapy, and to economic factors which prevented discharge from the hospital of those whose condition was improved, but not improved to the extent of complete "social" recovery

3 The average number of years of hospital life of those who died in the hospital has increased in terms of the combined effect of the increased age at admission and increased age at death. This increase is for the most part due to the increasing length of life of the dementia praecox patients who have the lowest rate of recovery in our mental hospitals The increase in this trend is, however, very slight

4 Factors influencing these rates to the greatest extent are. (a) increasing age of the general population, (b) better medical and

custodial care, *(c)* immigration, and *(d)* economic and urbanization effects.

REFERENCES

1 DAYTON, N A   *New facts on mental disorders*   Baltimore Charles C Thomas, 1940

2 LANDIS, C , & PAGE, J   *Modern society and mental disease*   New York Farrar & Rinehart, 1938

3 MALZBERG, B   Life tables for patients with mental diseases   *Psychiat Quart ,* 1932, 6, 226–241

4 PAGE, J , & LANDIS, C   Trends in mental disease, 1910–1940   This JOURNAL, 1943, 38, 518–524

5 *Annual Report of the Statistician, 1924–1940*   Springfield Department of Public Welfare, State of Illinois   (Some of these reports are annual, some biennial)

6 *Annual Report of the Commissioner of Mental Disease (Mental Health), 1917–1941*   Department of Mental Disease (Mental Health), Boston Commonwealth of Massachusetts   (Annual)

7 *Annual Report of the Department of Mental Hygiene, 1913–1941*   State of New York, Albany J B Lyon   (Annual)

A COMPARISON OF METHODS USED IN ATTITUDE RESEARCH *

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INTRODUCTION

VARIOUS discussions have appeared in the literature on attitudes touching upon the comparative merits and demerits of the "empirical" and "logical methods of attitude measurement" (3, 4, 7). So far, however, this methodological concern has expressed itself almost entirely in theoretical observations with no systematic investigation as to how the empirical and logical attitude yardsticks compare with each other *in actual practice* The present investigation is an attempt to ascertain whether the two methods of measurement, whatever their theoretical differences, do or do not yield different concrete results If they do not yield different results, the two methods are the same and logical arguments as to the superiority of one or the other become operationally meaningless

Three previous studies bear upon this problem Thurstone and Chave (10) in their construction of a Thurstone scale of attitude toward the church compared, in the interest of considerations of validation, their subjects' responses on the empirical scale with their responses on a graphic self-rating scale A correlation of $+.67$ was obtained for the responses on the two scales The authors did not draw the implications of this result for the question of the operational similarity of the two approaches to attitude measurement So the hint given here of the similarity of the two scales, in this one narrow sector at least, was allowed to pass unnoticed.

McGregor (*vide* Cantril, 1) in a study of attitudes toward war obtained a correlation of $+74$ between a Thurstone "empirical" scale and a "logical" graphic self-rating scale Unlike Thurstone and Chave, McGregor saw the methodological importance of this finding, and on the basis of the one correlation asserted that the two approaches yield similar results—which conclusion we shall

show later was not unfortunate, though one can hardly agree that it was warranted on the basis of such meager data.

Likert (5) compared responses on a logical scale with the Thurstone-Droba scale of attitudes toward war and obtained correlations of $+71$ and $+65$ which, when corrected for attenuation, became $+81$ and $+75$ respectively Likert, like McGregor, concluded from these correlations that a logical and an empirical approach to attitude measurement yield similar results But again the evidence was hardly systematic.

THE PRESENT STUDY

None of these studies has attacked the question of the comparability of the logical and the empirical approach to attitude measurement on a sufficiently wide front In each case the study was limited to a single issue and employed but one logical scale and one empirical scale Further, it will be later shown, the question of comparability cannot be answered unequivocally by correlation analysis alone The present study embodies both a wider and a more intensive investigation with the utilization of six social issues and three types of scales—Thurstone scales (empirical) and graphic self-rating and intensity of feeling scales (logical)

The use of three scales not only made possible comparisons of logical scales with empirical scales, but afforded the opportunity to compare two types of logical scales—a graphic self-rating scale and a self-rating scale of intensity of feeling Since the logical scales are much simpler and more widely applicable than Thurstone-type scales, this extra attention to their potentialities was indicated.

The following social issues were chosen as attitude variables for each scale These were selected from the list of issues for which empirically derived scales have been constructed They are

    1 The Scale of Attitudes toward the Negro
    2 The Scale of Attitudes toward the Germans
    3 The Scale of Attitudes toward the Treatment of Criminals
    4 The Scale of Attitudes toward Capital Punishment
    5 The Scale of Attitudes toward Evolution
    6 The Scale of Attitudes toward Communism

In these Thurstone scales, the issue involved is self-contained in the statements which the subject considers when indicating his attitudes This is not the case when the subject approaches the self-rating scale A statement of the issue must precede the scale

to indicate what he is favoring or opposing   Hence in comparing the self-rating scale with the empirical scale it is extremely important that the statement of the issue toward which the subject rates his own attitude be the same issue which is under consideration in the Thurstone scale   Otherwise differences in response could be due to a difference in subject-matter and not to a difference in scales

Therefore a careful consideration was made of the content of the Thurstone scales in order to determine how to state the issues on the self-rating scales so they would match those embodied in the Thurstone scales   As a result of this inquiry, the following six questions were selected:

1   Are you in favor of giving the Negro equal rights with whites in all respects, that is, educational, economic, and social, as well as legal rights?
2   Thinking of German people apart from their leaders and their national aspirations, would you say the Germans are a likeable people?
3   Would you say that the proper way to deal with criminals is still through punishment, or would you say that attempts to reeducate should take the place of punishment entirely, even though many such attempts have failed?
4   Should there be a law which abolishes capital punishment?
5   Do you think the theory of evolution should be considered as the best account that we have at the present of man's genesis?
6   On the whole, are you for or against Communism as a type of social system?

DESCRIPTION OF THE SCALES AND SCORING PROCEDURE

To each of these six questions were appended two different kinds of self-rating scales—a graphic self-rating scale and an intensity of feeling self-rating scale   Figure 1, shown below, illustrates the graphic scale upon which the subjects self-rated their attitudes toward the Negro issue. Similar scales were employed for the five other issues under consideration.[1]

Extremely
in Favor

Extremely
Opposed
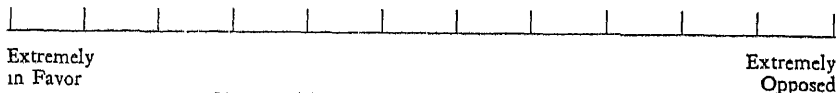
FIG 1. THE GRAPHIC SELF-RATING SCALE
(For attitudes toward the Negro)

The graphic self-rating scale is a five and one-half inch line graph (reduced in Figure 1) sectioned in 11 steps by very short vertical lines. The scoring procedure was very simple. With the starting-point at the Extremely Opposed end of the graphic scale,

[1] The actual forms upon which self-ratings were obtained in this study will be furnished upon request

the 11 intervals were assigned values from 1 to 11 in arithmetic progression.

When the scale is presented to the subject, neither the scale values nor other notations are made to describe each step, although the extremes of the scale are defined as noted If each step were to be characterized by a descriptive phrase such as is often seen on rating scales, the fundamental characteristic of the method would be destroyed—which is to allow the subject to interpret the meaning of the scale freely without the aid of verbal guidance

The second self-rating scale is an 11-step verbal self-rating scale The attitude dimension which the scale embraces is intensity of feeling. Figure 2 below illustrates the intensity of feeling scale upon which the subjects self-rated their attitudes toward the Negro issue Similar scales were employed for the five other issues studied The range and direction of scores are the same as used on the graphic scale

```
_____  Very intense feeling pro-Negro
_____  Intense feeling pro-Negro
_____  Strong feeling pro-Negro
_____  Moderate concern pro-Negro
_____  Slight feeling pro-Negro
_____  Don't care
_____  Slight feeling anti-Negro
_____  Moderate concern anti-Negro
_____  Strong feeling anti-Negro
_____  Intense feeling anti-Negro
_____  Very intense feeling anti-Negro
```
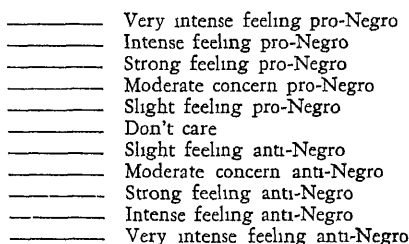
FIG 2 THE INTENSITY OF FEELING SELF-RATING SCALE
' (For attitudes toward the Negro)

There are two reasons why a scale of intensity of feeling was chosen as a comparison scale The first is that, as Thurstone (9) has described his scale, it is a measure of the affect for or against a social symbol. If such is the case, a scale of affectivity or feeling would approximate the attitude dimension in the Thurstone to a greater extent than a favor-oppose scale The second reason for choosing this scale lies in the fact that most of the self-rating scales have verbal categories of response, a feature not embodied in the graphic scale Furthermore, by using two different scales the scope of the investigation is extended so as to make possible a comparative study of self-rating scales.

The Thurstone scale, unlike these self-rating scales, is composed of a group of statements ranging from 16 to 20 in number, each

of which has a scale value   The subject is required to endorse or reject each of these statements, his score being the median scale value of all the statements that he endorses   If, for instance, an individual endorses statements on the Scale of Attitudes toward the Negro which have scale values that are very high, and the median of these scale values falls between 9 and 10 9, this score is interpreted to mean that he has a very liberal attitude toward the Negro   A score of 0 to 1 9 indicates strong prejudice against the Negro

METHOD OF ADMINISTRATION OF THE THREE SCALES

In order to make comparisons between the responses to the three scales, it is necessary to present to the same subject each of the three forms on which the different scales appear   One way of doing this would be to present each form in a different test period, but possible changes in attitude from one test period to another would be uncontrolled   To obviate this possibility it was decided to present all three forms in the same test period   This method, however, is open to the criticism that inasmuch as the subjects are asked to give their attitudes on three different scales toward the same issue at the same time the possibility arises that the responses on one scale may influence those on another   If the Thurstone scales were presented first, an orientation would be established which might carry over and influence the response to the other two scales   Furthermore, since the two self-rating scales are preceded by exactly the same statement of the issue and the task is much the same, there might be a tendency on the part of the subject to seek out similar positions for the sake of consistency, regardless of the difference in the form of these two scales

There seemed to be no way of entirely avoiding interaction among the scales   This effect was minimized, however, by randomizing the order of presentation of the scales, and by so doing eliminating any systematic effects which might arise from a constant position order   Therefore the group of 218 undergraduates who served as subjects were divided into six subgroups selected at random from the total number of subjects participating   Each subgroup received the three forms in a different order   In all the groups each form was collected before the next was presented   This procedure made it impossible for a subject to compare his response to one scale directly with his response to another

After the subjects in all groups had indicated their attitudes toward the six issues on each scale, the scores on the Thurstone scales were computed and the self-ratings were scored with the aid of simple scoring keys Initially the data for each subgroup were kept separate to check for possible effects of the relative position-order of each scale upon the distribution of responses for each group Treatment of these data revealed no statistically reliable differences among the mean scores of the subgroups since critical ratios between these measures for each type of scale ranged from oo to 60 Therefore the data from all subgroups were pooled and subsequently treated as one group

RESULTS AND INTERPRETATION

The bearing of the results of this study upon the fundamental problem posed at the outset may be profitably considered from two approaches first, through an analysis of the *distribution of responses* obtained upon the Thurstone scale and the two self-rating scales, and, secondly, through an analysis of the *correlations* obtained among the responses on the three scales Both approaches to the question of similarity of results obtainable by the use of Thurstone and self-rating methods are indicated because the distribution analysis is capable of revealing differences that the correlation analysis alone would overlook

Correlations, to illustrate, could be equally high under two quite dissimilar conditions. (1) with a *similarity* of means and variances of the distribution of responses upon the two types of attitude scales, and (2) with a *dissimilarity* of means and variances of the distribution of responses on the two types of scales Correlation merely indicates the extent to which the measures of each individual tend to occupy on the whole the same *relative* position on each scale. It does not indicate the extent to which the measures obtained on the two scales are similar.

This very important point seems to have been overlooked by McGregor and Likert since they did not report an analysis of the distributions of responses upon the Thurstone scale and the self-rating scale, but were content to infer similarity of responses on their two scales merely from the co-variation between the two sets of measures These correlations alone do not demonstrate the intrinsic similarity of the Thurstone scale and the self-rating scale,

but only show a relationship between them   To assume, as apparently McGregor and Likert did, that co-variation necessarily implies similarity is unwarranted.

Distribution analysis will indicate the extent to which the measures obtained on the two scales are similar, and hence is fundamental to the problem   Correlation analysis, however, is also necessary in order to demonstrate that if similarity of the distributions of the scores for the group is obtained it is due to the fact that each individual tends to obtain the same score on both scales

TABLE 1

COMPARISONS BETWEEN THE MEANS AND STANDARD DEVIATIONS OF THE DISTRIBUTIONS
OF RESPONSES TO THE THURSTONE SCALE, THE GRAPHIC SELF-RATING
SCALE, AND THE INTENSITY OF FEELING SELF-RATING SCALE

ISSUE UNDER CONSIDERATION	THURSTONE SCALE		GRAPHIC SCALE		INTENSITY SCALE		N
	MEAN	SD	MEAN	SD	MEAN	SD	
1 The Negro	7 97	1 40	6 34	3 70	6 22	3 31	179
2 The Germans	7 77	1 18	8 70	2 06	8 30	1 95	201
3 The Punishment of Criminals	6 38	82	5 76	2 58	5 84	2 77	171
4 Capital Punishment	7 67	1 78	8 77	3 07	8 20	2 70	193
5 Evolution	8 01	1 09	8 78	2 65	8 05	2 46	178
6 Communism	5 94	1 11	3 17	2 74	3 48	2 69	178

Table 1 shows the means and standard deviations of attitudes as computed from the responses made to the three types of scales—the Thurstone scale, the graphic self-rating scale, and the intensity of feeling self-rating scale   These measures are shown for the six social issues under consideration

A comparison of the means of the distributions on the three scales for each of the six issues revealed no statistically significant differences among these measures   The critical ratios between the means of the Thurstone score distributions and the means of the distributions of self-ratings on the two self-rating scales ranged from .015 to 916, while critical ratios between the means of the distributions on the graphic self-rating scales and the intensity of feeling self-rating scales ranged from .021 to .212

An examination of the standard deviations reveals that while the deviations about the means of the graphic scale and the intensity

scale are very much alike, both these variances are greater than the variance about the means of the Thurstone scores for all of the issues studied   Hence, self-ratings appear to have in general a greater range of variation than Thurstone scores   McGregor also found this to be the case for his one issue   He attempted, however, no explanation of why such a result should obtain.

The reason for the greater variability of the self-rating scores is perhaps not obvious, but, in essence, it is simple. It rests in a sense upon a statistical artifact   The Thurstone distribution, it must be remembered, is a distribution of averages, whereas the self-rating distribution is of first-order data   Obviously if sets of these Thurstone statements are collected, individual by individual, and an average is taken (as is done in effect by the Thurstone scoring procedure) the *variance* of the distribution upon the Thurstone scale will be constricted   If, however, the Thurstone distribution of averages is changed to a distribution of its first-order con- stituents (the scale values of the statements endorsed by the sub- jects) the variance of both distributions becomes of the same order of magnitude.

It becomes apparent, therefore, that the restricted variance arises from the statistical handling, namely, in the way the Thurstone scores are derived, and does not represent any inherent dissimilarity between the distribution of responses on the Thurstone scale and the self-rating scales.

A Direct Comparison of the Units Which Constitute the Thurstone Scale and the Self-Rating Scales

In the first experiment, on the basis of the similarity of means and variability, the inference was made that self-rating scales and the Thurstone scales were substantially similar metrics.   In this second experiment additional evidence was sought to confirm this inference   A group of subjects taken from the same population were instructed to give, not their own opinions as in the first experi- ment, but to compare directly representative units on the two metrics in order to see to what extent they coincided   To answer this query, the method could be used of asking a group of subjects to rate the entire set of Thurstone statements on the self-rating scales   However, if this procedure were followed, it is likely that the subjects would tend to place the most extreme statements of the Thurstone set at the extremes of the self-rating scales without

considering whether or not the positions at the ends of the scale should be left for possibly stronger opinions, and then proceed to fill in the other categories of the self-rating scale with the remaining statements relative to these reference points and to each other

The upshot of such a procedure would be that each Thurstone statement would be evaluated, not absolutely in terms of the self-rating categories, but in terms of the set of statements itself   The absolute judgment, however, is required for our purpose, and hence it was deemed more expedient to choose only a few statements from the Thurstone scales used in the present investigation, and have these statements rated on the graphic and the intensity self-rating scales

These statements were chosen from the extremes and the middle portions of the Thurstone scales in order to obtain ratings of representative units of the Thurstone scale on the self-rating scales Sixty-two subjects were presented with 14 statements selected from the six Thurstone scales previously used   They were asked to rate each statement on a graphic scale and on an intensity of feeling scale, identical with the scales used before, described in Figures 1 and 2   The published scale-values of these statements of course were not revealed to the subjects.   Scoring the ratings assigned to the statements on the two scales followed the same procedure as described for the self-ratings

The statements selected were those whose scale-values are in the region of the Thurstone scale wherein majority opinion lay, as found in the distribution of attitudes toward each issue   Here it had been found that 71 per cent of the group were pro-Negro, 94 per cent were pro-German, 84 per cent were pro-capital punishment, 87 per cent were pro-evolution, and 81 per cent were anti-communistic.   Two statements were selected from each of the Thurstone scales, with the exception of the Scale of Attitudes toward the Punishment of Criminals   Here it had been found that opinion was evenly divided   Therefore, four statements were selected from this scale.   Two reflected a favorable attitude toward the punishment of criminals and two reflected a favorable attitude toward corrective measures   By this procedure a group of the statements previously endorsed by a large majority of the subjects are brought under consideration.

The results of this inquiry, as well as the actual statements selected, are given in Table 2   As can be seen, the mean ratings on

TABLE 2

COMPARISON OF THURSTONE SCALE VALUES AND RATINGS ASSIGNED ON 11-STEP GRAPHIC AND INTENSITY OF FEELING RATING SCALES OF 14 STATEMENTS APPEARING ON THE THURSTONE SCALES

STATEMENT CONTAINED IN THE THURSTONE SCALES	SCALE VALUE	MEAN AND SD OF RATINGS ON THE GRAPHIC SCALE			MEAN AND SD OF RATINGS ON THE INTENSITY SCALE		
		MEAN	SD	N	MEAN	SD	N
1 The Negro should be given the same educational advantages as the white man	9 60	8 76	1 91	62	8 59	1 14	56
2 It is possible for the white and Negro races to be brothers in Christ without becoming brothers-in-law	6 60	6 99	2 92	62	5 28	2 76	50
3 We cannot help feeling true affection for the German people	8 50	8 71	1 51	61	8 74	1 00	61
4 The Germans are all right but a few of them gave the rest a bad name	6 50	7 63	2 01	61	8 12	95	38
5 A criminal will go straight only when he finds that prison life is hard	8 60	9 25	1 55	62	8 92	1 51	59
6 A combination of education and punishment is the best method of treating criminals	5 60	4 82	1 92	62	4 63	2 09	53
7 Correction is civilized, punishment is brutal	1 30	3 29	1 72	62	2 63	83	59
8 Corrective measures are just as necessary as punishment	4 80	4 21	2 18	61	3 50	91	47
9 Capital punishment is a very definite deterrent to major crimes	8 50	9 25	1 54	62	9 25	1 39	58
10 Capital punishment is wrong but it is necessary in our imperfect civilization	6 20	6 80	2 37	62	8 13	1 83	32
11 Anti-evolutionary legislation is ridiculous in a civilized nation	8 70	9 69	1 74	62	9 63	1 37	61
12 The evolutionary theory may contain errors but it is a step in the right direction	6 80	8 49	1 87	62	8 26	1 09	50
13 The whole communistic scheme is unsound	1 90	2 65	1 63	62	2 21	88	62
14 Communism is a much more radical change than we should undertake	3 80	4 53	2 25	62	2 87	1 27	52

the graphic scale and the intensity scale are not far removed from the scale values which Thurstone had determined by his method The greatest discrepancy was a difference of two step-intervals between the published scale value and the mean of the graphic ratings of the statement "Correction is civilized, punishment is brutal" In this instance the mean value of the ratings was less extreme than the scale values assigned to the statement by Thurstone's group of judges On the whole, however, ratings of these 14 statements on both the self-rating scales were substantially similar to the published scale values

The results of this experiment show that the Thurstone scale and the self-rating scales are not only similar in range and limits but are also internally similar, as indicated by direct comparison of representative units of both types of scales With this structural similarity established, attention can now be given to the analysis of the correlation between individual scores obtained on both types of measures.

Correlation Analysis

A correlation analysis is an important supplement to a distribution analysis, it has been pointed out, because, even though the distributions of responses are similar in means and variance on the two types of scales, only through correlation analysis can it be ascertained whether or not this similarity derives from the individual's making similar scores on the two types of scales—which condition is necessary before any assertion can be made of similarity of results to be obtained from the different types of scales.

Table 3 shows the correlation coefficients obtained between the responses to the three scales It can be seen that correlations between the Thurstone scores and the two self-ratings for the six social issues range from + 55 to + 84. These coefficients are, in general, as high as those reported by McGregor and Likert, and hence tie in with their findings The coefficients between the scores obtained on the two self-rating scales range from + 77 to +.96. These are apparently higher than those obtained between Thurstone scores and self-ratings—a result which will be considered later.

Before interpreting the results of the correlation analysis between the Thurstone scales and the self-rating scales, it is important to view the reliability of the three scales A number of reliability coefficients for the Thurstone scales have been reported in the litera-

ture * Ferguson (2) reports reliabilities ranging from + 52 to + 80 for the 40-item forms of the Thurstone scales, Nystrom (8) reports a reliability of + 92, and Likert, Roslow, and Murphy (6)

TABLE 3

CORRELATION COEFFICIENTS BETWEEN THE THURSTONE SCALE, THE GRAPHIC SCALE, AND THE INTENSITY SCALE

CORRELATION OBTAINED BETWEEN	ATTITUDES TOWARD THE NEGRO	ATTITUDES TOWARD THE GERMANS	ATTITUDES TOWARD THE PUNISHMENT OF CRIMINALS	ATTITUDES TOWARD CAPITAL PUNISHMENT	ATTITUDES TOWARD EVOLUTION	ATTITUDES TOWARD COMMUNISM
Thurstone Scale and Graphic Scale	751	576	552	745	772	840
Thurstone Scale and Intensity Scale	689	613	573	719	757	747
Graphic Scale and Intensity Scale	938	766	835	894	945	959

report reliabilities for forms of 20 items of the Thurstone scale ranging from + 42 to +.95, and from +.59 to +.97 for forms of 40 items.

From these reports, the highly significant fact becomes apparent that the correlations obtained in this investigation between Thurstone scores and self-ratings are of the same order of magnitude as the reliabilities of the Thurstone scale The correlations obtained between self-ratings and Thurstone scores for the Negro question are + 69 and + 75—the reliability of the Thurstone scale for this issue ranges from +.57 to +.88; correlations obtained between the scores on the two types of scales for the German issue are + 58 and + 61—reliability coefficients of the Thurstone scale for this issue range from + 42 to + 80; obtained correlations on the evolution issue are +.72 and + 75—the reliabilities of the Thurstone scale for this issue range from +.67 to + 89; and correlations obtained between the Thurstone scores and self-ratings for the communism issue are + 75 and + 84—reliabilities reported for the Thurstone scale dealing with this issue range from +.66 to + 97. These reliability figures were given by Likert (6). The reliabilities of Thurstone's Scale of Attitudes toward the Punishment of Criminals and the Scale of Attitudes toward Capital Punishment have not yet been reported.

From this comparison of obtained correlations and reliability coefficients, it is clearly seen that the obtained correlations tend to fall within the range of the reported reliability coefficients   This is true for both the high correlations and the lower correlations obtained

A factor, in addition to low reliability, which might contribute to the low correlation found between the scores on the Thurstone scale and the self-rating scales when attitudes toward Germans were obtained was the difficulty of wording the issue on the self-rating form so that it summarized in essence the issue under consideration in the Thurstone scale   On the self-rating scale, it was indicated that the "likeability of Germans apart from their leaders and national aspirations" was the issue   The Thurstone scale, although it dealt with the likeability of Germans, confused the issue by referring at various times to Germans in America, Germans in Germany, as well as to Germans in general   This difference in subject-matter probably resulted in a greater dissimilarity of attitude than would have been the case had the issues on the two scales matched each other more closely.   The same difficulty was experienced with the Punishment of Criminal self-rating scales   These scales were preceded by the phrase "attempts to reeducate should take the place of punishment entirely, although many such attempts have failed "   This phrase may have biased self-ratings by stressing the poor success achieved by education when dealing with criminals, a point not emphasized by the Thurstone scale

The conclusion drawn from the correlation analysis is that the Thurstone and logical scales yield substantially the same relative positions on the scales for the individuals in a group.   This finding, along with the results of the distribution analysis, is fundamental, as will be seen in the final collation of results

Attention must now be given to the correlation between the two self-rating scales, to see if they are in line with this conclusion.   As can be observed in Table 3, the coefficients obtained between ratings on the graphic and intensity scales are generally higher than those obtained between the Thurstone scores and self-ratings   If the reliabilities of self-rating scales are of the same order of magnitude as the Thurstone scales described, the conclusion that the Thurstone and the self-rating scales yield substantially similar results would not be tenable, for under this condition it would be indicated that higher correlations can be obtained among self-ratings than can

be obtained between self-ratings and Thurstone scores Therefore it becomes very important to determine whether or not any factors present in the test situation could be operating to increase the correlations among self-ratings above the level of those obtained between self-ratings and Thurstone scales

Such factors can be found It will be remembered that the subjects in this experiment were asked to self-rate their attitudes on the two self-rating scales in the same test period. These scales differed very little in content from each other, having identical statements of the issue preceding the scale It is quite possible that the subjects did not make any substantial discrimination between the two scales, however much one could logically defend a difference between the degree of favor toward an issue and the intensity of feeling with which an opinion is held Therefore, an additional inquiry was made of the relationship between self-rating scales under conditions which precluded the conditions stated above, namely, in a situation where the subjects would not be able to observe immediately the similarity of the scales, but would consider each scale at separate times.

A Further Study of Self-Rating Scales

In order to find out whether or not the very high correlations between self-rating scales are due to their being presented in the same test period, it was decided to discover the extent of correlation when one of the scales is presented a *week* after the first has been presented If under these circumstances the correlations were not higher than those obtained between self-ratings and Thurstone scores, and it was established as well that the reliability of these self-rating scales was of the same order of magnitude as that of the Thurstone scales, then the conclusion that self-ratings actually do not correlate any higher among themselves than they do with Thurstone scores would be indicated.

Hence two questions must be answered before this conclusion is drawn· (1) how high are the correlations between self-ratings when a week intervenes between the presentation of one self-rating scale and another, and (2) what are the retest reliabilities of each of these two self-rating scales if they are obtained with one week intervening between the first and second presentations of each scale?

In order to answer the first query, 13 topics of current interest were used as attitude variables They were as follows·

1 There should be a law prohibiting a fourth term for the President of the United States

2 In accordance with Secretary Morgenthau's proposal, the profits of corporations should be limited to 6 per cent

3 The government should establish and maintain more health clinics for people who cannot afford medical care

4 There should be a constitutional amendment which would give the Senate the right to elect the officers of the President's cabinet

5 Senators should be elected for a four-year term instead of the present six-year term

6 Strikes in defense industries should be made illegal

7 All fraternities and eating clubs should be abolished from American colleges and universities

8 Colleges should do away with athletic scholarships and all forms of financial help to athletes which are given primarily on the basis of athletic ability

9 Commercial broadcasting of college football games should be abolished

10 Radical student organizations like the American Student Union should be permitted in American colleges

11 Student Forum groups should be organized for students to discuss the important issues of the day

12 Tutoring in colleges should be abolished

13 All classes should be made to attend Sunday chapel

As can be seen, six of these topics dealt with issues in the political field, while the remaining seven issues were of a local, collegiate nature. Toward each of these issues a group of 76 undergraduates were asked to indicate their attitudes on a 9-step self-rating approve-oppose scale, and on a 9-step self-rating scale of intensity of feeling. The scoring procedure for each type of scale is shown below in Figure 3

APPROVE-OPPOSE SCALE	SCORE	INTENSITY OF FEELING SCALE
Very strongly approve	(1)	Yes, very intense feeling
Strongly approve	(2)	Yes, strong feeling
Moderately approve	(3)	Yes, moderate concern
Slightly approve .	(4)	Yes, slight feeling
Neutral	(5)	Don't care
Slightly oppose	(6)	No, slight feeling
Moderately oppose	(7)	No, moderate concern
Strongly oppose	(8)	No, strong feeling
Very strongly oppose	(9)	No, very intense feeling

FIG 3

Each subject rated his attitude toward the 13 issues on the two scales with a week intervening between the presentation of the first and second scales; half of the group receiving the approve-oppose scale first, and the other half receiving the intensity of feeling scale first.

The correlations between self-ratings on the two different scales toward the 13 issues are given in Table 4   These coefficients are seen to range from + 56 to + 84   They are identical in range

TABLE 4

CORRELATION COEFFICIENTS BETWEEN SELF-RATINGS ON THE APPROVE-OPPOSE SCALE
AND THE INTENSITY OF FEELING SCALE FOR THE THIRTEEN ISSUES CONSIDERED

ISSUE UNDER CONSIDERATION	CORRELATION COEFFICIENT	NUMBER OF RESPONDENTS
1 Fourth term for the President	742	63
2 Limiting profits to 6 per cent	734	61
3 Governmental health clinics	719	70
4 Senatorial jurisdiction over Cabinet	622	68
5 Four-year term for Senate	840	65
6 Strikes in war plants	709	69
7 Fraternities and eating clubs in colleges	788	73
8 Athletic scholarships	566	65
9 Commercial broadcasting of college football games	656	74
10 Formation of radical student groups on campus	687	64
11 Formation of student discussion groups	728	73
12 Tutoring in college	703	63
13 Compulsory Sunday chapel	717	76

with the coefficients obtained between self-ratings and Thurstone scores.   This answers in the affirmative our first question as to whether or not self-ratings correlate among themselves to the same degree as self-ratings and Thurstone scores correlate

The second query posed was whether or not self-rating scales are more reliable than Thurstone scales.   In order to ascertain the reliability of the self-rating scales described in Figure 3, each of the scales was presented twice to different groups of subjects   The retest reliabilities of the approve-oppose scales appended to the 13 issues described above were obtained by presenting the statements and the scales to 70 undergraduates twice, with one week inter- vening between the first and second presentations   The reliabilities of the intensity of feeling scales appended to the same 13 issues were determined by presenting another group of 70 subjects taken from the same population with the statement and the scales, following the same procedure as above   The scoring of the responses was identical with that given in Figure 3

The retest reliability coefficients are given in Table 5   They range for the intensity scale from + 66 to + 98; for the approve-

oppose scale, from + 50 to + 86 On the whole, the intensity of feeling scale proved to be a little more reliable than the approve-oppose scale, since in 9 out of 13 instances the coefficients obtained were slightly higher than those computed from retest ratings on the approve-oppose scale

TABLE 5

RETEST RELIABILITY COEFFICIENTS FOR THE APPROVE OPPOSE SELF-RATING SCALE AND THE INTENSITY OF FEELING SELF-RATING SCALE OBTAINED FROM RESPONSES TO THE THIRTEEN ISSUES CONSIDERED

ISSUE UNDER CONSIDERATION	N	RETEST RELIABILITY COEFFICIENT OF THE APPROVE-OPPOSE SCALE	N	RETEST RELIABILITY COEFFICIENT OF THE INTENSITY OF FEELING SCALE
1 Fourth term for the President	70	541	54	989
2 Limiting profits to 6 per cent	68	858	57	913
3 Governmental health clinics	69	764	67	665
4 Senatorial jurisdiction over Cabinet	69	796	59	687
5 Four-year term for Senate	69	611	55	802
6 Strikes in war plants	70	860	65	928
7 Fraternities and eating clubs in college	70	746	61	730
8. Athletic scholarships	70	800	61	768
9 Commercial broadcasting of college football games	70	718	63	767
10 Formation of radical student groups on campus	70	669	53	725
11 Formation of student discussion groups	70	797	65	841
12 Tutoring in college	70	501	60	745
13 Compulsory Sunday chapel	70	811	68	960

When these retest reliability coefficients are compared with the reliabilities of the Thurstone scales mentioned earlier, it is evident that they are, in general, of the same order of magnitude.

Hence it is shown, first, that self-ratings are similar in reliability to Thurstone measures, and, secondly, that the self-rating scales correlate no higher with one another than does either with a Thurstone scale So the apparently higher correlation between the two self-rating scales in the first experiment is eliminated as a criticism of the fundamental conclusion of the correlation analysis, namely, that self-rating scales and Thurstone scales yield a substantially similar relative placement of individuals in a group

Summary of Results and Conclusions

The query posed at the outset of this investigation into the comparability of methods employed in attitude research was. To what extent do the results obtained by the use of a logical technique of attitude measurement differ from the results obtained by the use of an empirical technique?

From the evidence presented in this study, the conclusion follows that substantially equivalent results are obtained by the Thurstone method (empirical technique) and by simple self-rating methods (logical technique)

This evidence has been gained by means of two analytical approaches to the problem· first, through the analysis of the distribution of responses obtained on the Thurstone scale and on the two self-rating scales, and, secondly, through an analysis of the correlations obtained among the responses on the three scales

The results obtained from the distribution analysis indicated that the Thurstone scale and self-rating scales are similar in range and limits, as shown by the similarity of the means and variances of the distributions of responses   Further, the scales are internally similar, as indicated by direct comparison of representative units of both types of scales

With these facts established, a correlation analysis then demonstrated that the similarity of distributions derived from the individuals' making similar scores on the two types of scales   The extent to which the responses correlated was limited by errors of measurement found to attend both the Thurstone scale and the self-rating scales, as shown by the fact that reliability coefficients of the two types of scales were of the same order of magnitude as the correlations obtained between these two types

The conclusion is drawn, therefore, that Thurstone scales and self-rating scales yield results which are, in general, essentially the same.

This assertion of similarity is based not only upon the correlations obtained between these measures, but also upon the demonstration of the similarity of the distributions of responses on both types of scales. Correlations alone cannot establish similarity, since they are merely indices of the extent of co-variance between the two measures, which may or may not be similar. Since McGregor and Likert inferred similarity of responses on their two scales merely from

the correlation between the two sets of measures, their conclusion was not well grounded.

The methodological importance of the findings in the present study should be appreciated, since the Thurstone method requires a tremendous expenditure of time and effort before a scale is available for the measurement of attitudes toward even a single social issue Self-rating scales, on the other hand, are relatively easy to construct and can be applied in a great number of situations where it is a practical impossibility to construct an attitude scale by the Thurstone procedure.

BIBLIOGRAPHY

1 CANTRIL, H   Measuring attitudes   *Pub Opinion Quart*, 1937, 1, 107–108
2 FERGUSON, L W   The requirements of an adequate attitude scale   *Psychol Bull*, 1939, 36, 665–673
3 GUILFORD, J P   *Psychometric methods*   New York McGraw-Hill, 1935   Chap 9
4 KATZ, D , ALLPORT, F H , & JENNESS, M B   *Student attitudes, a report of the Syracuse reaction study*   Syracuse Craftsmans Press, 1931   Chap 20
5 LIKERT, R   A technique for the measurement of attitudes   *Arch Psychol, N Y,* 1932, 22, No 140
6 LIKERT, R , ROSLOW, S , & MURPHY, G   A simple and reliable method of scoring the Thurstone attitude scales   *J soc Psychol*, 1934, 5, 228–238
7 LUNDBERG, G A   *Social research, a study in methods of gathering data*   New York Longman's, 1929   Chap 8
8 NYSTROM, G H   The measurement of Filipino attitudes toward America by use of the Thurstone technique   *J soc Psychol*, 1933, 4, 249–252
9 THURSTONE, L L   The measurement of social attitudes   This JOURNAL, 1931, 36, 249–269
10 THURSTONE, L L , & CHAVE, E J   *The measurement of attitude*   Chicago Univ Chicago Press, 1929

ANIMISTIC THINKING IN BRAIN-INJURED, MENTALLY RETARDED CHILDREN *

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MANY studies on the development of the child's thinking have pointed out that the young child first views the world animistically, he does not restrict life to the biological forms, that is, to animals and plants (2, 3; 5; 8, 15; 16; 17) Piaget, in particular, has made several significant investigations which demonstrate a genetic sequence of stages leading from an animistic to a realistic attitude toward objects (9)

However, so-called animistic behavior is not entirely a genetic problem. In the normal adult realistic behavior probably varies in degree depending on the personality structure. Moreover, animism seems related to certain psychopathological states, such as, for instance, schizophrenia In other words, an animistic attitude may be a result of a normal personality development, but it may also be related to abnormal mental organization.

Certain behavior characteristics of brain-injured children demonstrated in earlier experiments by Strauss and Werner led to the impression that these children have an attitude toward everyday objects and events less factual and realistic than non-brain-injured children of the same mental ages (14).

For example, in the "Picture-Object Test" the child was required to place before two large pictures various objects which he thought to belong with each picture The one picture showed a boy who is about to drown; the other presented a building on fire. Whereas the non-brain-injured control group accepted the task of the test as a logical problem of the realistic grouping of objects, the brain-injured children dramatized the situation, expanded it far beyond the immediate, and frequently changed the common meaning of the objects to fit into their imaginative trend of thought. Not only in this test, but in other similar experiments, brain-injured children

revealed their trend toward animation by the predominant place-
ment of human and animal figures into the scene

From these previous experiments it seemed reasonable to assume
that brain-injured children are more animistic in their conception
of objects and events than non-brain-injured children   The present
study was carried out in order to test such an hypothesis   Two
experiments consisting of questions about the animistic attributes
of various objects were conducted   Two groups of children, all
boys, participated, the responses of a group of children whose
mental retardation is ascribed to early brain-injury were compared
with the responses of a control group of children of the so-called
"endogenous" or familial (hereditary) type of mental deficiency [1]
These children were arranged into 18 pairs closely matched accord-
ing to mental age and intelligence quotients   The mean IQ of the
brain-injured group was 73 1, ranging from 63 to 87; the mean
IQ of the non-brain-injured group, that is, children of the familial
type, was 74, ranging from 63 to 84.   The mean MA's for the two
groups respectively were 10–0, ranging from 8–1 to 12–3, and 10–1,
ranging from 8–3 to 12–0.

Experiment I

Procedure

Russell and Dennis (10, 11, 12) constructed a standardized
testing procedure based on one of Piaget's studies of animism (9)
In general, we followed this procedure in the first experiment   The
child and the examiner were seated before a table on which were
placed in random order a small round stone, a small pocket-knife,
a small square mirror from a purse, a broken button from a man's
overcoat, a pocket comb, a soup bowl out of which a large piece was
broken, and an eversharp pencil   The child was questioned on
these and other objects and events, they were easily divided from
the adult's point of view into the following classes

Inanimate objects—stone, knife, mirror, button, comb, chair, dish, pencil [2]
Natural events—river, clouds, moon, wind, lightning
Animals—dog, bird, bug
Plants—tree, flower, grass

[1] As to the diagnosis of these two types of children see (13)
[2] A watch, originally included, was omitted in the final analysis of results since such a
mechanical device seemed to us to be in a class by itself

The subject was asked the following questions concerning each object "Is the —————— living or dead?" and "Why?" If the subject suggested motion as a criterion of living, an additional question was asked by the examiner, *viz* "Is the —————— living or dead when it is moving?" If it was not apparent as to whether spontaneous or imparted movement was referred to, the subject was asked. "Can the —————— move by itself or does something make it move?" In case it was felt that the subject was perseverating in his answers, we recalled him for re-examination, at this time the 19 objects were presented in the reverse order of the previous testing Detailed protocols of the subject's responses were made

Results of Experiment I

Range of Objects Considered Alive

The first aspect of our analysis concerned the range of objects considered living by the children [3] Since all children thought of plants and animals as alive, we confined this phase of our analysis to their responses pertaining to the inanimate objects and natural events

As Table 1 shows, each of the eight objects of the inanimate class was more frequently regarded as alive by the brain-injured group than by the control group The brain-injured child on the average thought 60 4 per cent of the objects of this class were living, whereas the familial child on the average believed 34 per cent of the objects were living This difference is significant according to chi square analysis at the 1-per-cent level.

TABLE 1

OBJECTS CONSIDERED LIVING—MEAN PERCENTAGE PER CHILD IN EACH GROUP

CLASS OF OBJECTS	BRAIN-INJURED	FAMILIAL
Inanimate	60 4	34 0
Natural Events	91 1	81 1
Plants	100 0	100 0
Animals	100 0	100 0

[3] The analysis of this study differed from that of Russell and Dennis in two respects *(a)* No attempt was made to place each child with respect to Piaget's four developmental stages of animism, the conclusions were drawn from the responses of each group as a whole *(b)* We did not restrict ourselves to the discerning of these four stages, but considered in detail the specific criteria on which the children's judgments were based

A similar trend, though not as outstanding, is observable in the responses relating to the class of natural events Here, again, with the exception of "lightning," each of these objects was considered as living more frequently by the brain-injured group than by the familial group On the average, 91 1 per cent of the natural events was considered to be living by the brain-injured child as compared with 81 1 per cent by the familial child. This difference approaches the 5-per-cent level of significance

In brief, the brain-injured group judged a wider range of objects as living than did the control group. This greater amount of animistic thinking in brain-injured children refers particularly to the class of inanimate objects As will be seen, these results are corroborated by a further analysis of the data.

Piaget's Developmental Stages

Piaget concluded from his studies that in the normal child four developmental stages of animism are noticeable· (1) life is characterized by activity in general; (2) life is indicated by movement, (3) life is denoted by spontaneous movement, (4) life is restricted to animals and plants (9)

The question arose as to whether a difference between the two groups with respect to these stages could be found Since our material did not warrant a differentiation as sharply defined as Piaget's four developmental stages, we divided the responses into two major stages: a lower and a higher. The lower stage consists of Piaget's stages 1 and 2; the higher comprises his stages 3 and 4

Table 2 presents the percentage distribution of the responses of the two groups of children according to the two major stages.

TABLE 2

PERCENTAGE DISTRIBUTION OF RESPONSES WITH REFERENCE TO PIAGET'S STAGES
FOR EACH GROUP

	BRAIN-INJURED	FAMILIAL
Piaget's Early Stages	30 0	18 0
Piaget's Advanced Stages	70 0	82 0

The results point to a significant difference between the two groups. Thirty per cent of the responses of the brain-injured group can be placed in Piaget's stages 1 and 2 against 18 per cent of the familial

group. Correspondingly, 70 per cent of the responses given by the brain-injured group point to higher stages of development, against 82 per cent by the familial group These results indicate that the children of the brain-injured group are significantly lower on Piaget's developmental scale.

Analysis of Criteria Used

A further analysis of our data was qualitative in nature It dealt with the criteria on which the children based their opinions as to whether objects were or were not alive We could distinguish the following nine criteria:

1 "Whole"—A response was catalogued under this term if the object was considered as living because it was complete, not broken

> Example (Is a chair living or dead?) Living (Why?) 'Cause ain't nothing broke off (Brain-injured child)

2. "Use-Whole"—This is an intermediate criterion having characteristics of criteria 1 and 3 An object was judged as living if it seemed usable as a consequence of its completeness

> Example (Is the button living or dead?) Dead (Why?) A button would be on you You'd be using it That one ain't living no more   that one's broken (Brain-injured child.)

3 "Use"—A child bases his idea of living on usability *per se*

> Example (Is the stone living or dead?) Living (Why?) 'Cause you can use it   make a stone house (Brain-injured child)

4 "Movement imparted"—Life is defined by any form of movement which is not explicitly determined as self-activity

> Example (Is the mirror living or dead?) Dead (Why?) It's laying down and nobody's moving it (Is the mirror living or dead when it is moving?) Living (Familial child)
> Example (Is the moon living or dead?) Living (Why?) It moves (Does it move by itself or does something make it move?) 'The clouds make it move (Brain-injured child)

5 "Movement spontaneous"—Self-activity is the criterion of living

> Example (Is the moon living or dead?) Living (Why?) It moves (Does it run by itself or does something make it run?) *Runs by itself* (Familial child)

6 "Physical effect"—Life is defined in terms of effects stated as coming from a natural cause, of situations involving interactions, etc

> Example (Is lightning living or dead?) Living. (Why?) 'Cause everytime the clouds bump together, it thunders and lightnings (Familial child)
> Example (Is the moon living or dead?) Living (Why?) 'Cause he shows the sun's shining (Familial child)

7 "Organic biological"—A function pertaining to all organisms denotes life

> Example (Is grass living or dead?) Living (Why?) 'Cause the rain

gives it showers   (How does that make it living?)   Water soaks up in it   Water makes it *grow*   (Familial child)

8 "Animal biological"—Functions as found in animals are the criterion of living

Example   (Is the moon living or dead?)   Living   (Why?)   It always is tooken care of by God   He feeds it   it's got to *eat* some way   (Brain-injured child)

9 "Human"—The basis for judgment is characteristic human behavior, such as talking, thinking, etc

Example   (Is the wind living or dead?)   Alive   (Why?)   It talks to you It says, "Whoo-oo-oo "   (Brain-injured child)

Example   (Is a chair living or dead?)   Dead   (Why?)   You sit on it and it don't tell you to get up   (Brain-injured child)

The frequency of each of the nine criteria was first calculated for each child in terms of percentage of his total responses [4]   Table 3 presents the mean percentage distribution of the nine criteria for each group separately   The table shows a marked difference

TABLE 3

FREQUENCY DISTRIBUTION OF CRITERIA OF REASONING
MEAN PERCENTAGES PER CHILD IN EACH GROUP

CRITERIA	BRAIN-INJURED	FAMILIAL
Whole	5 6	3 9
Use-Whole	6 3	5 1
Use *	*16 1*	*5 3*
Movement Imparted	6	1 6
Movement Spontaneous *	*16 4*	*36 8*
Physical Effect	9 6	6 8
Organic Biological	19 3	17 4
Animal Biological	16 4	17 3
Human *	*9 6*	*5 7*

* Criteria on which the two groups differ significantly have been italicized

between the two groups in the following criteria. "whole," "use," "movement spontaneous," "physical effect," and "human " The brain-injured children employed more frequently the criteria of "whole," "use," "physical effect," and "human" than the familial children   On the other hand, the familial children used more frequently the criterion of "spontaneous movement " The differences in the frequency of the criteria "use," "movement spontaneous," and "human" are statistically significant according to the chi square test

[4] It should be noted that occasionally the child used two criteria in his response to a question   In this case both criteria were recorded

After grouping the objects into four classes, the above analysis was made for each class   Table 4 presents the mean percentage distri-

TABLE 4

CRITERIA WITH REGARD TO CLASSES OF OBJECTS—MEAN PERCENTAGES PER CHILD IN EACH GROUP

CRITERIA	INANIMATE OBJECTS		NATURAL EVENTS		PLANTS		ANIMALS	
	B.I *	F †	B I	F	B.I	F	B I	F
Whole	10 4	8 4	4 7	8	0	0	0	0
Use-Whole	14 8	9 0	1 1	0	0	0	0	0
Use	29 0	12 1	12 6	1 6	0	2 8	4 2	0
Movement Imparted	1 5	3 4	2 2	0	0	0	0	0
Movement Spontaneous	15 2	43 6	28 3	61 4	0	1 4	13 2	24 6
Physical Effect	1 0	0	33 2	26 2	0	2 2	0	0
Organic Biological	7 6	6 7	7 4	4 0	100 0	85 6	0	0
Animal Biological	9 2	10 3	2 5	6 0	0	8 1	68 8	73 6
Human	11 2	6 4	8 0	0	0	0	13 8	1 8

* Brain-injured
† Familial

bution of the criteria with regard to these four classes. The following peculiarities may be noted in the responses of the brain-injured children   The criterion "use" was not limited to their reasoning about inanimate objects, but appeared also in their statements on natural events. For instance, a brain-injured child thought of the river as being alive because of its use for boat-carrying, fishing, etc Furthermore, with these children the criterion "human" occurred not only in the animal class but also in the classes of natural events and inanimate objects. These peculiarities are found far less often in the responses of the familial group.

To sum up, whereas the familial children were predominantly concerned with impersonal activity, the brain-injured children frequently employed the criterion of "use" and "human," both referring to a human situation   Thus, it appears that the frame of reference in the reasoning of the brain-injured children is to a great extent that of the human sphere

References to Human Situations

In order to inquire more thoroughly into the extent to which brain-injured children center their reasoning around human situations, we catalogued all answers which contained any kind of such

reference   We were not concerned solely with the criteria used in their judgments of "living" or "dead" but with the frequency of any kind of human reference mentioned in the responses of the brain-injured children. To illustrate, though a child may use the "organic biological" criterion of "growing" for deciding that grass is living, in addition he may relate this criterion to a human situation. For example·

> (Is a flower living or dead?) Living (Why?) The supervisor plants 'em put 'em in gardens and all that   (Why does that make them living?) He puts seeds   they grow out of the ground

The following examples may serve as further illustrations of the manner in which brain-injured children brought into their reasoning the human relationships:

> (Is a bird living or dead?) Living   (Why?) He flys around, eats, and everything like we do   We don't fly, but try to anyway and break our necks
> (Is a bird living or dead?) Living   (Why?) If he were dead, we wouldn't hear him sing

A frequency distribution of the number of responses containing human situations was calculated for both groups of children. In this computation the responses to the objects of the inanimate class were left out, since objects of this class are generally conceived as being of use to humans, both brain-injured and familial children often included references to human situations in this class   Again, the results show that brain-injured children referred frequently to human situations, even if the class of man-made objects was left out of consideration, 28 8 per cent of their responses contained such references   Only 9 6 per cent of the familial children's responses included statements about humans   The difference is statistically significant at the 1-per-cent level according to the chi square test.

Actually, one kind of human reference occurred relatively often with the familial group, these children frequently referred to grass dying after people stepped on it   Since children of the Training School are taught not to step on the grass in order not to "kill" it, such responses are quite natural   Human references to other objects, however, though frequent with brain-injured children, were rare with the familial group

Commonness of Responses

Another aspect of the analysis pertains to the variability of responses   We considered only the actual content of the children's

reasoning; the variability due only to verbal expression was disregarded.

In previous experiments on the conceptual thinking of brain-injured children, it was consistently found that these children exceeded in unusual, often strange, associations Thus, it seemed probable that the brain-injured children in the present study would give a greater variety of responses than the non-brain-injured children This expectation was borne out by the results.

Here, again, as in previous studies, responses which appeared to the examiner to be out of the ordinary came much more often from the brain-injured than from the control group Some illustrations may be given·

(Is lightning living or dead?) Living (Why?) Because something in the air like gravity pulls it away from each other and it goes like lightning (Can you explain more about that?) Something up in the air and something on the earth pulls something and the lightning goes off

(Are clouds living or dead?) Dead (Why?) 'Cause they move apart Like a big cloud breaks up   goes apart They can't see each other so often

(Is a stone living or dead?) Living (Why?) 'Cause it sits where nobody can run over it sometimes (Can you explain more about that?) Like if a stone gets run over if it's in the way of a car, it might pop up at the window Just like when we were riding once in a car, and it came up and broke the window

(Is a stone living or dead?) Dead (Why?) 'Cause it's been broke off of another one (Was the stone living or dead from which this one was broken?) Dead (Why?) If someone broke off of us, we'd probably be dead, too half-dead, rather (Why was the other stone dead, though?) 'Cause this piece was broke off of it

Two statistical computations were made to determine the relative variability of the responses for the two groups of children One concerns the number of different answers for each object, the other, the number of answers appearing only once for each object. The results of these two computations are presented in Table 5.

The first two columns of the table show the mean percentages of different responses within each of the four classes of objects for each group of children[5] The following procedure was used for this computation We tabulated for each group the various reasons given by the children for their judgments of ;"living" or "dead" for each object Then, the number of different reasons was calculated in terms of percentage of the total number of responses given

[5] Occasionally, more than one answer to a question were given by a child and had to be scored separately

TABLE 5

PERCENTAGE OF DIFFERENT ANSWERS AND UNIQUE ANSWERS PER CLASS

CLASS	DIFFERENT ANSWERS		UNIQUE ANSWERS	
	B I	F	B I	F
Inanimate Objects	47 8	35 6	25 8	16 3
Natural Events	72 0	42 8	57 6	27 8
Plants	31 7	33 3	18 7	22 3
Animals	52 7	37 3	39 3	22 0
Total	52 4	37 4	35 0	21 0

by the group for that object. The figures in the table represent the means of the percentages, calculated for each class of objects.

As the table indicates, the total mean percentage of different responses referring to the objects of the four classes is greater for the brain-injured group than it is for the control group. To point out, 52 4 per cent of a total of 375 reasons given by the brain-injured children for their judgments of "living" or "dead" were different; on the other hand, only 37 4 per cent of a total of 371 reasons given by the familial children were different. This difference between the two groups is statistically significant at the 1-per-cent level of Fisher's *t*-test. The greatest difference between the groups appears in the class of natural events; this is understandable since the less tangible character of the objects of this class instigated more unusual and far-fetched answers than found with the objects of the other classes.

The incongruity of reasons within the brain-injured group can be further demonstrated by calculating the frequency of those answers which appeared only once   The last two columns of Table 5 present the frequencies of such "unique" answers within the four classes of objects for each clinical group   These frequencies are expressed in terms of percentages of the total number of responses for each class. Thirty-five per cent of the reasons of the brain-injured group appeared only once as compared with 21 per cent of those of the familial group   This is a difference significant at the 2-per-cent level of Fisher's *t*-test

EXPERIMENT II

Procedure

The second experiment was carried out particularly to meet a criticism which could be raised against the first experiment, *viz.,* that it was too much on the verbal and abstract level to obtain an adequate interpretation of the children's ideas concerning the animistic attributes of the objects Experiment II, following to a great extent a procedure used by Piaget (9), served as a check of the results from the first test Whereas the questions of the first experiment pertained only to the general concepts of "living" and "dead," the questions of the second test were of a more concrete nature. For instance, the child had to decide whether a chair "feels" it or not when it is cut with a knife

Experiment II dealt only with inanimate objects and natural events since in the first experiment the questions concerning animals and plants did not bring out significant differences between the two groups. In order to guard against the possibility of perseveration, questions dealing with the objects of the two classes were usually alternated and the words "feel" and "know" were interchangeably used. A number of questions, which were not an intrinsic part of Piaget's tests on animism, concerned the capability of various inanimate objects and natural events for being "mean." The following questions were asked of the children:

Consciousness of inanimate objects and natural events

(Ask "why" after each question.)

If you prick a *stone* with a needle, does the stone feel it, or doesn't the stone feel it? (If the child answers that the stone doesn't feel it because of its hardness, then ask the same question about the stone being cut by a knife)

2. Does the *sun* know that it is hot, or doesn't it know it?

3. If you put a *pen* into ink, does the pen feel it, or doesn't it feel it?

4 If the *wind* blows against the house, does the wind know that it is stopped, or doesn't it know it?

5 The *river* runs sometimes slow, sometimes quick Does the river feel it, or doesn't it feel it, when it runs fast or when it runs slow?

6. If you cut a *chair* with a knife, does the chair know that it is cut, or doesn't it know it?

7 Does the *rain* feel that it is warm or cold, or doesn't it feel it?

8 Does a *bicycle* know when it is going, or doesn't it know it?

9 Suppose that you are in an airplane, and you go up to the *clouds,* and you prick a cloud with a needle Do you think the cloud feels it, or doesn't it feel it?

10 Does *water* feel anything? (If the answer is "No," ask if it feels anything when it is boiling)

11 If you move a *table* from here to there, does the table know it, or doesn't it know it?

12 There is a *stone* on the road   The stone is all alone since no other stones are on the road   Does the stone know that it is all alone, or doesn't it know it?

13 Does the *sun* see us? (If the child says it can see us, ask with what does it see us and if the sun has eyes)

14 If you cut a *pen* with a knife, does the pen feel it, or doesn't it feel it?

15 Can the *wind* stop when it wants to stop, or can't it stop?

16 A *chair* is knocked over   Does the chair feel it when it is knocked over, or doesn't it feel it?

17 Do the *clouds* know they are moving, or don't they know it?

18 If you cut a *table* with a knife, does the table feel it, or doesn't it feel it?

Meanness of inanimate objects and natural events

1 Sometimes you stumble over a *chair* at night, do you not?   Do you think the chair is mean?

2 Can a *knife* be mean?

3 Do you know of other things that can be mean?   (If only animals were mentioned by the child, he was asked if any other things besides animals could be mean)

4 Can a *tree* be mean?

5 Can the *wind* be mean?

6 Can *lightning* be mean?

In contradistinction to the rigid manner in which the children were questioned in the first experiment, this test was conducted more freely. Although, in general, we kept closely to the content of the questions printed above, we often asked additional questions in a free manner; hence we made sure that we understood what the children were thinking about the objects

Results

Before we proceed to a quantitative analysis of the results, a few illustrations of the manner of reasoning may be given   These examples are restricted to answers ascribing consciousness to the objects.

(Does the sun know that it is hot?)   It knows it   (Why?) 'Cause he is made out of fire and fire lives   he eats up wood   he can burn anything in his way and make water dry up   (Familial child)

(If you put a pen into ink, does the pen feel it?)   It feels it.   (Why?) It knows it when it gets full   like when you get full in your stomach   (Brain-injured)

(If the wind blows against the house, does the wind know that it is stopped?) Yes, it knows it   'cause it makes noise then   (Brain-injured)

(Does the river feel it when it runs quick or slow?)   Sure he feels it   he feels the ground   (Brain-injured)

(Does the chair know it when it is cut with a knife?)   Yes   . because he feels the chunk coming out   (Familial)

(Does a bicycle know when it is going?)   feels it in the wheels (Brain-injured)

(Does the cloud feel it when it is pricked by a needle?)   feels it because it pricks the cloud   (Brain-injured)

(Does the water feel it when it is boiling?)   Yes   because it hits then the bowl   (Brain-injured)

(Does the table know it if it is moved?)   It knows it   'cause it has been in the place so long that it knows if it is going to a different place   (Brain-injured)

(Does the sun see us?)   Yes, it looks right onto you when it shines   (How does the sun see us?   Does the sun have eyes?)   No, it has no eyes   His light makes the sun see us   (Familial)

The quantitative analysis of the results of Experiment II was limited to the problem of the relative number of animistic answers given by the two groups for the two classes of inanimate objects and natural events   For this purpose the responses were arranged under three categories   inanimate objects having consciousness, natural events having consciousness, and inanimate objects and natural events considered "mean" (see Table 6)   Then, the average number of animistic responses in each category was computed.

Children of the brain-injured group gave for the questions concerning the consciousness of inanimate objects 33 8 per cent animistic answers (5 6 animistic answers per question), the familial group offered only 11 6 per cent of such responses (2 animistic answers per question)   This difference between the two groups is at the 1-per-cent level of significance according to Fisher's t-test

TABLE 6

FREQUENCIES OF ANSWERS ASCRIBING CONSCIOUSNESS TO OBJECTS (PERCENTAGES)

CATEGORIES	BRAIN-INJURED	FAMILIAL
Inanimate Objects Having Consciousness	33 8	11 6
Natural Events Having Consciousness	54 2	22 2
Inanimate Objects and Natural Events Considered "Mean"	59 0	28 0

Both groups of children gave more animistic responses to the questions about consciousness of natural events.   However, there is still a significant difference between the two groups, the brain-injured children gave 54.2 per cent animistic answers, while the

children of the familial type gave only 22 2 per cent. This difference is also significant at the 1-per-cent level of Fisher's *t*-test.

In the last category concerning the "meanness of various inanimate objects and natural events, there is again a marked difference in the number of animistic responses given by the two groups, brain-injured children gave 59 0 per cent animistic responses while the familial children gave 28 0 per cent.

In conclusion, the second experiment confirms the general results obtained in the first experiment   The answers to the questions of Experiment II concerning conscious life of inanimate objects and natural events indicate again that the brain-injured children are more animistic in their thinking than the children of the control group

DISCUSSION

Limitations in Scope of the Two Experiments.   The term "animism" was used originally in anthropology and pertained to the belief of primitive peoples in mystic forces, spirits, or souls residing in any kind of object.   The word "animism" is employed in this paper in a definitely restricted/ sense and should not be identified with the anthropological concept   It merely means a lack in distinguishing living, biological forms from inorganic objects

Another limitation concerns the general interpretation of the results.   It must be remembered that the experiments were tests of *verbal* concepts and not of concrete actions   Therefore, a direct inference cannot be drawn from the results as to the behavior of children in everyday life situations; one would not expect, in general, those children who ascribe feeling to a chair to behave overtly toward a chair as a living body.

However, though the immediate results of the experiments deal only with the meaning of words such as "living," "feeling," "knowing," etc , the experiments cannot be considered simply as studies of language independent of conceptual thinking   There are at least two reasons against a purely verbalistic interpretation of the results. (1) As will be discussed later, brain-injured children are not only equal, but superior, to familial children on a test of defining words varying in frequency of general use   (2) Our experimental results are in accord with certain peculiarities of thinking of the brain-injured children appearing in previous tests

of conceptual thinking; actually, the hypothesis that brain-injured children are more animistic than familial children was suggested by these earlier investigations Too, comprehensive studies by Piaget and others on the reasoning of normal children have shown that animistic ideas expressed in verbal tests are related to, and even dependent on, basic characteristics of child thought

Therefore, although it must be kept in mind that the responses in the present tests are only verbal, it can be assumed that they reflect the fundamental animistic reasoning of the children.

Interpretation of Results The two experiments of this study, using two different approaches, concur in one result· Children of the brain-injured group considered each object of the inanimate class as well as the class of natural events as alive more frequently than did the control group. The difference between the two groups is greater in the second experiment than it is in the first, this greater discrepancy may be interpreted as follows: It has been shown repeatedly (17) that animistic attitudes vary within the same mental-age level depending on the concreteness of the problem and on the individual's experience with the problem situation involved. A child is usually more mature in his reasoning about a situation with which he has been in close relationship, he is less realistic in a situation which is more abstract or which is less familiar to him. Consequently, we had to expect that children of both groups would give less animistic responses in the second experiment; for the most part a concrete situation was presented in this test whereas in the first experiment the questions were more abstract. This expectation was borne out by a comparison between the results of the two experiments, as shown in Table 7

Moreover, since according to our hypothesis children of the familial type are more factual minded than brain-injured children, situations of a concrete kind should influence realistic reasoning in

TABLE 7

COMPARISON OF PERCENTAGES OF ANIMISTIC RESPONSES IN THE TWO EXPERIMENTS

	INANIMATE OBJECTS		NATURAL EVENTS	
	B I	F	B I	F
Experiment I	60 4	34 0	91 1	81 1
Experiment II	33 8	11 6	54 2	22 2

the control group relatively more than in the brain-injured group
This is shown in our results where a relative drop in animistic
responses from Experiment I to Experiment II is much greater with
the children of the familial group

A further point of our discussion concerns the criteria for defining
living and dead employed by the two groups in the first experiment
The analysis brought out clearly differences in the mental attitude
of brain-injured and non-brain-injured children toward familiar
objects and events   As will be remembered, previous tests of con-
ceptual thinking showed that brain-injured children, in contra-
distinction to the realistic attitude of non-brain-injured children,
showed a trend toward dramatization and animation in simple tasks
of relating objects to one another, they tended strongly to inject the
human element into such groupings

It is in accord with these findings that in the first experiment one
outstanding criterion, "human," used by the brain-injured group
for defining life deals with characteristic human behavior.   The
higher frequency of the criterion "use" employed by brain-injured
children also points to the same tendency because "use" is a criterion
taken from a human frame of reference.   On the other hand,
familial children employed most frequently the criterion of "spon-
taneous movement," which again implies that these children are
more factual minded than the brain-injured children

If the results of Experiment I and Experiment II are evaluated
purely from an objective point of view, it must be concluded that
brain-injured children are retarded in their formation of concepts
of the outside world   However, such an interpretation is irrecon-
cilable with clinical observation and experimental work concerning
these children   An example is an experiment by Bijou and
Werner (1) on the ability of brain-injured and familial children to
define words   Children of both groups were presented sixty words
which vary in their frequency of general use [6]   Brain-injured chil-
dren scored higher on this test of verbal concepts than non-brain-
injured children of corresponding mental ages   Therefore, a
conclusion from the present study that brain-injured children are
generally retarded in concept formation would contradict the results
of the vocabulary study.   The discrepancy in the objective results of
the two studies shows that the brain-injured child's so-called

[6] From *The teacher's word book* by E I Thorndike

retardation in animistic concepts cannot be evaluated with reference to a general retardation in verbal concepts

The disagreement in the results of the vocabulary test and this study appears again with respect to the employment of the criterion "use." In the present study the brain-injured children employed "use" much more frequently than the familial children It will be remembered that the employment of this criterion for defining words is a sign of early stages in concept development In the vocabulary study it has been shown that brain-injured children are more mature since they employ the "use" criterion significantly less often than the control group Consequently, it is not feasible to refer to immaturity of concept formation for explaining the predominant employment of "use" as a criterion of living by brain-injured children in the present study "Use" is employed here most frequently, not because of immaturity in conceptual thinking, but, as mentioned before, because of the tendency peculiar to the brain-injured child toward personalization, according to the brain-injured child's point of view the objects may seem alive if they partake in human activity.

To sum up, the greater amount of animism found in the reasoning of the children of the brain-injured group cannot be interpreted in terms of a general retardation of concept formation; the inferiority of brain-injured children within this particular area of concept formation probably has to be related to response patterns peculiar to an abnormal development

Relation of Animism to Normal and Pathological Development. Animism is due to a lack in the ability to differentiate living from non-living objects In normal development the egocentrism of the young child appears to be a principal cause of animistic thinking; the child at first does not conceive of objects existing entirely apart from himself and being of an essentially different nature since he interprets all objects and events with reference to his own knowledge of the outside world The growing child gradually becomes more experienced, he learns that the relationship between himself and physical objects is of another kind than that between person and person He discriminates more and more mental characteristics such as intention, will, and feelings from physical characteristics such as solidity and motion The child becomes more realistic the more he masters the material world on one side and

communicates with the social world on the other side, so taking
into account the specific properties of both

What are, then, the general pathological conditions of the brain-
injured organism which counteract this normal development?
Some suggestions may be offered.

It is well-known that the brain-injured individual is abnormally
distractible; he is to an inordinate degree influenced by external
stimulation   For instance, sounds or lights that the normal child
ignores may force the brain-injured child's attention toward them
This clinical symptom has been described as "forced responsiveness
to stimuli" and "the stimulus bond" (4)   In such an organism
greatly steered by outside stimulation the essential difference
between oneself as a person, who masters the external world by
planful action, and objects must necessarily be less felt

On the other hand, the brain-injured organism often displays a
lack of spontaneity, an inertia. This symptom exhibits itself in the
child's inability to shift from one activity to another   It has been
discussed as "fixation" and "perseveration" Such a pathological
condition could also obstruct the child's understanding of purposeful
activity as a characteristic of a person in contradistinction to a thing.

Still other behavior characteristics of brain-injured children are
lack of emotional control and motor disinhibition, sometimes
termed "organic drivenness" (6, 7)   Here, again, one may assume
that an individual who is lacking in willful, self-directed behavior
is less aware of the difference between spontaneous, personal activity
and external occurrences in the world of things

SUMMARY

Eighteen pairs of mentally retarded children were tested in two
experiments on animism.   Each pair was composed of a brain-
injured child and a non-brain-injured (familial) child matched
according to mental age and intelligence quotient

Experiment I consisted of asking questions as to whether various
objects and events were "living" or "dead " The objects and events
were arranged into four classes· inanimate objects, natural events,
plants, and animals. The following statistically reliable differences
between the brain-injured and non-brain-injured children were
found.

1. *Range of objects* Brain-injured children more often con-
sidered objects of the inanimate class as living than did children of

the familial type. A similar difference also was found with respect to the class of natural events.

2. *Developmental scale·* When the responses were objectively evaluated on Piaget's developmental scale of animism, the brain-injured children appeared to be significantly lower on this scale than the children of the control group

3. *Criteria of reasoning.* Brain-injured children differentiated between living and dead more frequently on the basis of the object's use and human characteristics Children of the familial type discriminated more frequently on the basis of spontaneous movement

4. *References to human situations.* The brain-injured children tended in general to center their reasoning around human situations. This seems to have a bearing on their frequent employment of the criteria of "use" and "human" mentioned above.

5. *Commonness of responses* There is a greater variability in the responses of the brain-injured children than in those of the familial group. The number of unique answers, that is answers given only once, was higher in the brain-injured group than it was in the familial group.

The second test consisted of questions concerning the capability for feeling, knowing, being mean, etc, of inanimate objects and natural events This experiment corroborated the results of the first. The brain-injured children gave a significantly greater number of responses indicating their belief in conscious activity of these objects.

The higher degree of animistic thinking in the brain-injured children cannot be explained with reference to a general retardation in verbal concepts; an attempt has been made to interpret it in terms of response patterns peculiar to an abnormal development

REFERENCES

1 BIJOU, S W , & WERNER, H   Language analysis of mentally retarded brain-injured children   (To be published)
2. BUEHLER, C *Kindheit und Jugend* Leipzig Hirzel, 1931
3 DENNIS, W   Historical notes on child animism   *Psychol Rev.,* 1938, 45, 257–266
4 GOLDSTEIN, K *The organism* New York American Book Co , 1939
5 HALL, G S   The contents of children's minds on entering school   *Ped Sem ,* 1891, I, 139–173
6 KAHN, E , & COHN, L C   Organic drivenness, a brain-stem syndrome and an experience *New England J Med ,* 1934, 210, 748
7 KASANIN, J   Personality changes in children following cerebral trauma   *J nerv ment Dis ,* 1929, 69, 385–398
8 MARKEY, F V   *Imaginative behavior in preschool children* New York Columbia Univ Press, 1935
9 PIAGET, J   *The child's conception of the world* New York Harcourt, Brace, 1929

10 RUSSELL, R W, & DENNIS, W Studies in animism I A standardized procedure for the investigation of animism *J genet Psychol*, 1939, **55**, 389–400

11 RUSSELL, R W Studies in animism II The development of animism *J genet Psychol*, 1940, **56**, 353–366

12 RUSSELL, R W Studies in animism V Animism in older children *J genet Psychol*, 1942, **60**, 329–335

13 STRAUSS, A A Typology in mental deficiency *Proc Amer Ass ment Def*, 1939, **44**, 85–90

14 STRAUSS, A A, & WERNER, H Disorders of conceptual thinking in the brain-injured child *J nerv ment Dis*, 1942, **96**, 153–172

15 SULLY, J *Psychology of childhood* New York Appleton, 1896

16 SULLY, J *Children's ways* New York Appleton, 1897

17 WERNER, H *Comparative psychology of mental development* New York Harper, 1940

A THREE-COMPONENT THEORY OF LEADERSHIP

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THE problem of leadership is becoming increasingly important in the world of today Its theoretical and practical ramifications extend into the varied fields of social psychology, personality, and applied psychology, touching upon the problems of leadership of social groups, the "personality" of leaders and executives, and the selection of leaders and executives in business, government, and other social institutions

Two points seem clear from psychological studies of leadership (1) There is little agreement among various studies of the personality or measurable characteristics of "leaders" Bird, for example, culled a list of 79 traits of leaders from "approximately twenty inquiries bearing some resemblance to controlled investigations"[1] Among the studies he found "surprisingly little overlapping". only 5 per cent of the traits were common to four or more studies (2) Almost every student of leadership agrees that leadership and its characteristics are 'relative to the situation' Leadership-traits valuable in one situation may be indifferent in another, and vice versa

The suggestion appears to be in order that not much good is served by compiling "lists of traits" of leaders. Perhaps we need a little transfer of training from our experience with the "lists of instincts" controversy A second suggestion might be that, while psychologists agree that leadership is relative to the situation, too little has yet been done in the way of analysis of the "situations." Our thesis is that the main problem of leadership-characteristics is the discovery, not of leadership traits-in-general, nor of types-of-leadership-situations alone, but of the functional relations *between* given traits and given situations The present paper is an effort to conceptualize certain possible relationships of this sort, in the hope that these conceptions may prove suggestive for empirical investigation.

[1] Charles Bird *Social psychology* New York. Appleton-Century, 1940

"JOB ANALYSIS" OF LEADERSHIP

Our hypothesis takes its origin in the finding of industrial psychologists that the first effective step in devising selection techniques is a job analysis. Applied to leadership, this suggests that the first problem in its empirical investigation is the actual *analysis into specific activities* of the functions of a leader or executive.

Three Categories of Leadership-Functions. Lacking an empirical job analysis of the activities of leaders and executives, we suggest that these activities might tentatively be broken down into three general categories One group of leader-functions seems primarily concerned with *planning*: The leader, executive, or administrator must consider aims, objectives, goals (possibly even ideals). A second category of activities is involved with ways and means of translating these goals into actuality. Since the realization of goals usually involves organization of activity, let us call these *organizational* duties Finally, the leader must persuade his followers to cooperate in carrying out the plans through the organized channels. This category of executive functions we may call *persuasive.*

We might illustrate the functions occurring in each of these categories in terms of the "duties performed by executives" in business companies as revealed in Cleeton and Mason's analysis of executive functions[2] They find eight management problems, which we would suggest might be grouped as follows:

Planning.
  1 Determination of problems (of supply, production, etc)
  2 Planning the solution of these problems

Organization·
  3 Organization of personnel and physical equipment to carry plans into operation
  4. Coordination of organization into a balanced unit.
  5 Testing, checking and modifying organization to compensate for inevitable changes

Persuasion
  6 Delegation of responsibility for execution of plans
  7 Supervising agencies operating to carry out plans
  8 Maintaining control of organization, applying techniques of control

Very probably, of course, such a grouping of leader-functions into three categories fails to include all of the activities leaders do engage in. This question, as well as the validity of the groupings

[2] G U Cleeton and C W Mason An analysis of executive functions *System & Business Management,* 1934, 63, No 12

in the first place, should properly be settled by adequate job analysis of many leaders in action. Furthermore, obviously, the activities of any given leader may not extend, or extend equally, over all three categories. And individuals not bearing the title of "executive" or "leader" may from time to time engage in various of these activities These qualifications necessarily reflect the existing lack of specificity and uniformity in the referent of "leadership "

A Continuum of Leadership-Functions Having broken down leadership-activities into three categories, our next step in trying to make the concepts meaningful and useful is to suggest that these functions may be thought of, not as discrete categories, but as points falling along a continuum The extremes of this continuum of activities seem to be 'formulatory' activities (planning) and 'executory' activities (persuading, getting the plans carried out), with perhaps organization and coordination somewhere near the middle. This schema seems of value, in that it takes account of the fact that these activities, *in vivo,* are not separate and distinct from each other, but overlap and shade imperceptibly into one another Each specific function of a leader (*e g ,* planning) could be thought of as occurring at any or all points along the continuum, but as having a "central tendency," or being most significant, at some particular point in the scale "Determining problems and planning their solution," for example, is a function met with throughout the whole range of a leader's duties But the 'modal' point in frequency of discovery and solution of problems perhaps is met in the leader's role as planner

Describing this continuum alternatively, in terms of the actual 'products' of the leadership-situation—the articles or services being sold by a business, the services rendered by a government or institution—some of the leader's activities are more remote (*e g ,* planning) and some are more immediate (*e g ,* execution) Similarly, in terms of the relation of the leader to the led, planning activities are remote, executory activities are immediate. To put this in terms familiar from sociology, executory or persuasive activities involve 'primary,' face-to-face, contacts with followers. Organizational activities partake of an 'institutional' nature, and involve 'secondary' contacts Planning is removed one degree more from face-to-face contact, and might be termed 'tertiary.'

Put in tabular form, then, our 'three-component' hypothesis of leadership-functions might be expressed thus (remembering that

each component is probably present in all ranges of the continuum, though it is here assigned a single position in terms of its 'central tendency') ·

TABLE 1

LEADERSHIP-FUNCTIONS

	Planning	Organizing	Persuading
Purpose	Aims, goals, ideals	Ways and means	Putting-into-effect
Duties	Determining prob-lems	Coordinating efforts	Gaining cooperation
	Solving problems	Systematizing, routin-izing	Supervising, control-ling
Nature	Formulatory	Executive	Supervisory
	Ideational activities	Institutional activities	Interpersonal activi-ties
Relation to products	Remote	Intermediate	Immediate
Relation to people	Tertiary	Secondary	Primary

If a job analysis of leadership-functions were actually carried out (and the results bore any resemblance to the present theory), it would probably be found that there is considerable variation among leaders' jobs in respect to 'central tendency' and 'spread' The jobs of certain leaders (*e.g*, business executives) might fall, in nature and frequency of their various activities, primarily in the organizational sector The jobs of others (*e g*, boards of directors) might involve, with greatest frequency, planning; while still others (*e g*, foremen and supervisors) most frequently function as persuaders This suggests, for those who are interested in selection and placement of leaders (in industry, government and other institutions), that ultimately it might be possible to write "job specifications" for various leadership positions in terms of the central tendency and spread of the specific activities involved

"PERSONALITY ANALYSIS" OF LEADERS

In view of the apparent diversity of situational functions of the leader, it seems most probable that there will be a corresponding diversity of personality or temperamental traits associated with successful leadership Indeed, the finding in studies of leader personalities has been of an appalling diversity of traits. Can we, without pretending to all-inclusiveness, introduce any order and coherence into the congeries of traits offered in the literature as characteristic

of leaders, and can we, then, discover meaningful relationships between such traits and the various leadership activities?

Besides the schedule prepared by Bird,[3] Britt lists 60 traits that "taken together . . . constitute a fair representation of the principal attributes of leadership "[4] Krout adds another 25 traits, compiled by a psychiatrist "from a study of one hundred selected leaders in the fields of politics, education, history and other phases of social life "[5] Taking all these lists together, probably the 164 traits mentioned constitute a fair sample of the traits held to be important by students of leadership.

About 18 per cent of these suggested traits seem inapplicable to our present purposes, either because they are circular in their definition (e g, "ability to lead," "good natural ability," "competent") or too vague in their reference (e g, "faith," "noble," "common sense"). The remaining 135 traits constitute the grist for our mill. Inspectionally, these traits seem to fall into a few general groups or clusters These clusters are listed below, omitting obvious duplications in trait names.

1 *Intelligence*
   High intelligence, insight, intellectual vision, brilliant, clever, well-informed

2 *Moral sensitivity*
   Fairness, justice, sound judgment, open-mindedness, devotion to truth, moral vision, altruism, idealism

3 *Imagination*
   Originality, imagination, forethought, inquisitiveness, mental flexibility, wide interests

4 *Restraint*
   Restraint, inscrutability, self-control

5 *Dynamic physical characteristics*
   Physical power, size, strength, tonus, erect carriage

6. *Drive and determination*
   Zeal, drive, enthusiasm, dynamic personality, face-to-face mode of address, aggressive, ambitious, ascendant, desire for eminence, brave, persistent, tenacious, perseverance, singleness of purpose

7 *Responsibility*
   Mature, dignified, frank, appearance of character, stable, reliable, neat, integrity, devoted to duty, industrious, love of work, concentration

8 *Self-reliance*
   Sense of purpose and direction, self-reliance, self-confidence, self-trust, decisiveness, initiative, finality of judgment

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[3] *Op cit*, p 378
[4] S H Britt *Social psychology of modern life* New York Farrar & Rinehart, 1941
[5] M H Krout *Introduction to social psychology* New York Harper, 1942

9. *Imperturbability*
   Poise, serenity, self-composed, even-tempered, cheerful, optimistic, patient, tolerant

10 *Social responsiveness*
   Susceptibility to social stimulation, social participation, friendliness, affection, sociable, extroverted, expansive

11 *Easy maintenance of good relations with others*
   Tact, diplomacy, kindness, sympathetic, cooperative, humanness, knowledge of human nature

Obviously, this grouping is simply inspectional   But the clusters evolved here from an inspection of leadership traits cited in the literature do appear to bear some relation to the clusters determined by factor analysis of interests and attitudes   Factorial studies of such scales as the Strong Vocational Interest Inventory have shown [6] a basic factor of "technical or scientific interest," and another factor of "interest in verbal, linguistic or symbolic activities"   It seems possible that these might be factors somewhat related to our first three clusters of traits of 'intelligence, moral sensitivity, and imagination'   The measured factor of "interest in people and social welfare" appears clearly related to our tenth cluster of 'social responsiveness'   The factors of "interest in business" or in "promotional and managerial activities" may well be related to our clusters of 'drive, responsibility and self-reliance.'   Allowing for the fact that one approach is by way of leaders' traits and the other by way of (primarily) vocational interests, these similarities may lend some credence to our clusters

RELATION OF 'TRAITS' TO 'FUNCTIONS'

If, then, it may be taken as reasonable to group the characteristics of leaders in some such clusters as we have suggested, what relation may these clusters bear to our suggested 'three components' of leadership-activities?

The various natures of the specific activities found suggest that they would most adequately be performed by individuals high in certain corresponding aptitudes.   Mason and Cleeton and others,[7] it is true, report that there do not seem to be any specific traits or aptitudes in which executives are found to excel.   I suspect that this may be because there were no specific sectors of executive or leadership *functions* differentiated in the gathering of subjects to

be tested. If all types of leaders are lumped together for an average, it is not surprising that the means of their traits should be about average The fact that we use the same word to apply to a variety of behaviors does not demand that another single word (trait-name) will describe all the abilities related to the behaviors. The grounds are better, in fact, for supposing that not until we differentiate more precisely the performances can we discriminate more accurately the abilities.

We would propose that the first four clusters of leadership traits, 'intelligence,' 'moral sensitivity,' 'imagination,' and 'restraint' (and the apparently related factors of interest in "scientific" and "symbolic" activities) are most clearly relevant and valuable to those activities we described as "planning" The functions of planning are primarily of a problem-solving nature. It seems reasonable, in the light of psychological knowledge of problem-solving activities, to suppose that these activities are most effectively carried on by individuals characterized by high intelligence, open-minded outlook, imaginative temperament, and predominance of implicit (symbolic) over overt behavior-tendencies So whatever "special abilities" are required by the leader's planning-activities seem most adequately described by the first four of our clusters.

What characteristics relate especially to the "organizational" functions of leaders? We suggest that, of the eleven clusters, those emphasizing 'drive and determination,' 'responsibility,' and 'self-reliance' most closely relate to organizing, coordinating, and managing behaviors Since drive and determination in temperament are often associated with dynamic "physical" characteristics (cluster five), it seems reasonable to group this cluster with the preceding ones. It may be, also, that the vocational interest factors of interest in "business" and in "promotional and managerial activities" relate most closely to the organizational functions of the leader.

Third, there seems to be a rather clear relation between "persuasive" activities of leaders and the trait clusters of 'social responsiveness,' 'imperturbability' (patience, tolerance, poise), and 'easy maintenance of good relations with others.' And, again, the interest factor of "interest in people and social welfare" seems to tie in rather well with the rest of the pattern.

Let us represent these proposed relationships in terms of our earlier scheme of a continuum of leadership-functions (Table 1) We suggest that, as was the case with the various functions, the

clusters of traits related to these functions be thought of as being continuously distributed throughout the whole range, but as having points of "central tendency," or regions of greatest importance, approximately congruent with the central tendencies of the respective activities Thus, the continuum of leadership-traits would parallel that of leadership-functions, and be similar in showing certain traits "concentrated" at certain points Table 2 indicates, in tabular form, this conception of leadership traits and their relations to leadership-functions

RELATIONS TO PERSONALITY THEORY

Having thus "analyzed" the "job" and the "man," can we take any further step in the direction of clarifying the relation of leadership traits and abilities to leadership situations and functions? It

TABLE 2

PARALLEL CONTINUA OF LEADERSHIP FUNCTIONS AND TRAITS

LEADERSHIP-FUNCTIONS		
Planning	Organizing	Persuading
Formulatory activities Aims, goals, ideals Determining and solving problems	Executive activities Ways and means Coordinating Systematizing	Supervisory activities Putting-into effect Gaining cooperation Controlling
Tertiary contacts Ideational behavior	Secondary contacts Institutional action	Primary contacts Interpersonal action

LEADERSHIP-TRAITS		
Ideational	Organizational	Interpersonal
Intelligence, insight Devotion to truth, open-minded Imagination, forethought	Physically dynamic, energetic Drive, determination Responsibility, reliability, stability Self-reliance, initiative	Social responsiveness, sympathy, amiability Imperturbability, patient, composed, tolerant Easy social relations
Interest in scientific, symbolic activities	Interest in promotional, managerial activities	Interest in people, social welfare

seems to us that one fruitful step would be that of attempting to integrate the still somewhat diverse collection of leadership traits into one or more of the existing systematic conceptualizations of the nature and form of personality traits in general This would have the advantage of carrying us toward further coherence of our descriptive and theoretical constructions of two important areas in

the fields of personality and social psychology. Any rapproche-
ments we may be able to perceive between and within these as yet
somewhat "unstructured" fields may be welcomed as signs of
developing integration within the 'body psychologic'

We shall approach the problem here in terms of two systems of
personality or temperament, each of which has been rather elab-
orately worked out by its author, and each of which purports to be
getting at rather fundamental patterns of personality   Each has
also the practical advantage, for investigational purposes, of coming
equipped with measuring devices relating to the hypothecated basic
traits   Both of them, Spranger's 'six-value' [8] theory and Sheldon's
'three-component' theory,[9] have been subjected to criticism [10] which
should be borne in mind, in the present connection. This is not,
however, an attempt to defend either theoretical position, but rather
to apply the insights of each to the problem at hand

We suggested, in the preceding section, that there may well be
three "components" of leadership-ability interest in and aptitude
for ideational activities; interest and aptitude in organizational
activities; and interest and aptitude for interpersonal, persuasive
activities. The diagnosis of these interest and temperament patterns
is by no means the exclusive property of Spranger or Sheldon, but
their respective systems do seem to point up these patterns rather
sharply. The interest in facts and ideas which perhaps character-
izes planning ability is the basis of Spranger's "theoretical" interest
The predominance of ideational, attentive, and integrative behavior
accompanying planning activity is likewise characteristic of
Sheldon's "cerebrotonia." The interest in power, command, and
management which presumably is important to organizational
activity is clearly the basis of Spranger's "political" interest, and
equally predominant in Sheldon's "somatotonia." The interest in
people, valuable to persuasive ability, is similar to Spranger's "social"
interest and Sheldon's "viscerotonia "

Certainly there is not claimed here a one-to-one correspondence
of either Sheldon's or Spranger's system to the sets of suggested
leadership-traits. However, the parallel is at points almost remark-
able between the three groups of trait-clusters and the traits
"defining" Sheldon's components of temperament   The "idea-

[8] E Spranger *Types of men* (Trans)   Halle Niemeyer, 1928
[9] W H Sheldon   *The varieties of temperament* New York Harper, 1942
[10] Cf A Anastasi   Review of Sheldon's *Varieties of temperament* *Psychol Bull ,* 1943,
40, 148

tional" clusters of intelligence, moral sensitivity, imagination, and restraint approximate several of the cerebrotonic traits of emotional restraint, mental and emotional versatility, acute awareness, and desire for insight and understanding. The "organizational" clusters of dynamic physical characteristics, drive, responsibility, and self-reliance are very recognizably pictured in the traits of somatotonia The somatotonic's assertiveness, abundant energy, frank, direct manner; stability, trustworthiness and maturity of appearance; love of dominating, of prestige and power, competitive aggressiveness and enterprise, and his confident self-dependence, freedom from doubt and ready initiative clearly mirror the suggested "organizational" clusters. And similarly the "interpersonal" clusters of imperturbability, social responsiveness, and easy maintenance of good relations with others have a close parallel in such viscerotonic traits as easy relaxation in speech and movement, evenness of emotional flow, insensitivity to irritations, easygoing tolerance and amicability, sociophilia, accurate orientation to people, free communication of feelings, love of polite ceremony, and the unctuous, indirect approach

INTEGRATION OF THESE ANALYSES

By way of drawing together these hypothecated relationships into an integrated picture of leadership abilities, let us represent them in graphic form. Figure 1 is an attempt to suggest the pattern in which such aspects of personality as temperament, values, and vocational interests may be related to traits and functions of leadership .

The rectangular figure is taken to represent, simultaneously, both the area of leadership-functions and the appropriate traits of leaders engaged in these functions. By this device, we more clearly indicate the probability that both functions and traits are distributed along a continuum, the horizontal dimension. The vertical dimension permits us to represent the variations in importance of the suggested traits in their contributions to the execution of different functions

Thus, the area of planning-activity lies toward the left of the figure. We suggested that ideational aptitudes are most important for this sort of activity, and that the effective planner might be high in theoretical and symbolic interests, and of predominantly cerebrotonic temperament This pattern of traits is pictured in the figure by assigning a large area to these traits, and smaller areas to organi-

zational and interpersonal aptitudes   As we move toward functions of an organizational or persuasive nature, the importance of ideational aptitudes becomes less and less, though it does not disappear completely, even in primarily persuasive activities.   This we have tried to show by a "negatively accelerated" curve

LEADERSHIP-FUNCTIONS

PLANNING   ORGANIZING   PERSUADING

THEORETICAL   VALUE

SYMBOLIC   INTEREST

CEREBROTONIA

SOMATOTONIA

POLITICAL   VALUE

MANAGERIAL INTEREST

VISCEROTONIA

SOCIAL   VALUE

SOCIAL INTEREST

IDEATIONAL   ORGANIZATIONAL   INTERPERSONAL

LEADERSHIP-TRAITS
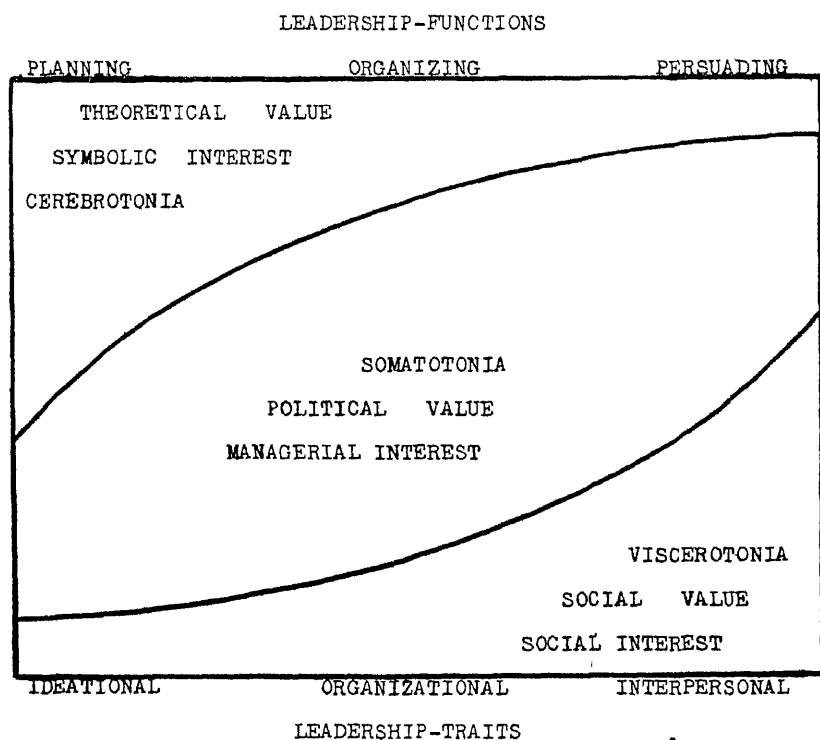
FIG I   HYPOTHETICAL PATTERN OF FUNCTIONS AND TRAITS OF LEADERS

The area of organizational activities lies toward the center of the figure, and here the political and managerial interests, and the somatotonic temperament, have their greatest importance   The emphasis upon organizational traits is seen to be diminishing as we move toward either planning or persuading activities   But in view of the general nature of leadership, the interest in power and management probably remains considerable throughout the whole range of functions.   Consequently, the area assigned to these traits does not diminish as markedly as do the areas for the other two categories.

Third, toward the right of the figure lies the area of persuasive

activities The increasing importance, as we move in this direction, of aptitude in interpersonal relations is pictured by the "positively accelerated" curve for social interests and viscerotonic traits.

If such a figure as this could actually be drawn, from empirical data, it might have considerable value in practical situations. One application, for example, might lie in the field of personnel selection If "job specifications" could be written for each executive position, each position might then be "located" at a given point along the continuum of functions. By dropping a vertical line from this point, one might then, reading from the empirical curves, specify the particular pattern of temperament and traits most suited to the requirements of the job Conversely, such a figure might find application in vocational guidance. By administering to the counselee a test battery measuring such traits, the counselor could "locate" him, along the trait continuum, at a point descriptive of the counselee's pattern of temperament and interests A vertical line erected over this point would then indicate the leadership or executive area within which this individual would most effectively function.

Finally, such a figure, perhaps with modifications, might have some conceptual value for personality theory, as indicating some of the possible patternings of personality, and some of the relationships between various systematic approaches to personality.

RELATIONS BETWEEN SPRANGER AND SHELDON

The preceding analysis of leaders' personalities stimulated us to inquire whether correspondences, of the sort we suggested, would be found between the approaches of Spranger and of Sheldon to personality We have made a modest pilot study of this question, and it seems worthwhile to include here the results

Method

For the measurement of Spranger's six evaluative attitudes, Allport and Vernon have devised *A Study of Values* Ideally, in determining the relations between Spranger and Sheldon, the *Study of Values* should be administered to individuals who have previously been rated in terms of Sheldon's sixty traits of temperament Such rating, however, requires not only considerable training in the handling of Sheldon's scales (of which we have not had the benefit), but also the study of each individual over the period of one year. For the purposes of an exploratory study, we felt that it would be of considerable interest to approach the problem in a much simpler fashion, through the use of self-estimates of Sheldon ratings. As Sheldon warns, self-ratings on the temperamental traits are not very dependable It seemed

reasonable to suppose, however, that individuals could rate themselves with con-
siderably greater objectivity and accuracy on Sheldon's components of physique,[11]
so this was the procedure adopted Since the reported correlations between the
components of temperament and physique are of the order of 80, results in terms
of physique may also be suggestive of relationships to temperament

Students in the writer's psychology classes provided the main body of subjects
Sheldon's check lists of inspectional criteria for the three morphological components,
endomorphy, mesomorphy and ectomorphy, were discussed at some length with
the students, together with descriptions of many of the 76 somatotypes Every
effort was made to make the students as familiar as possible with the identifying
physical characteristics Then they were asked to estimate their own somatotypes,
striving especially to be accurate with regard to the relative dominance of the three
components It was felt that, even though students might not be able to judge the
strength of each component to its precise point-value on the seven-point scale, they
could hope to be fairly accurate in judging which component was strongest, which
next strongest, and which weakest

A month before these self-ratings were gathered, the students had been given
the *Study of Values* To provide a larger number of cases, several of the students
cooperated by obtaining somatotype estimates and Allport-Vernon scores of friends
They were instructed, in such cases, to choose only people obviously strong in some
one component, since extreme cases are more readily judged than the mid-range
somatotypes In all, 156 cases were obtained, 100 women and 56 men There
should have been more men, but the Army at this point had priority on manpower

Results

In computing the results, the subjects were first divided into three
groups, according to their dominant components Those who are
highest in first component (soft, round) are classified as endo-
morphs, those highest in second component (square, muscular) as
mesomorphs; those highest in third component (thin, linear), as
ectomorphs

For these three groups, mean scores were computed for each of
the six values on the Allport-Vernon test These means are shown
in Table 3 To make these raw scores more meaningful, they have

TABLE 3

MEAN SCORES OF SHELDON'S MORPHOLOGICAL GROUPS ON THE STUDY OF VALUES

COMPONENTS	N=	THEO	ECON	ESTH	SOCIAL	POL	RELIG
I Endomorphs	40	26 6	27 9	30 1	36 7	31 7	26 9
II Mesomorphs	59	26 2	29 9	27 6	30 7	39 4	26.2
III Ectomorphs	57	34.6	25 4	33 4	28 7	28 3	29 6

[11] W H Sheldon *The varieties of physique* New York Harper, 1940

been translated into percentiles, by means of a percentile curve drawn from the table of percentile values provided by Allport and Vernon.[12] The percentiles appear in Table 4.

TABLE 4

PERCENTILE VALUES OF MEAN ALLPORT-VERNON SCORES

COMPONENTS	THEO	ECON	ESTH	SOCIAL	POL	RELIG
I Endomorphs	39	45	56	*85*	65	41
II Mesomorphs	38	56	43	60	*91*	38
III Ectomorphs	*77*	35	*72*	49	47	54

In both tables, the highest value for each morphological group has been italicized   These turn out as had been predicted   Of the six Spranger values, the endomorphs average the highest in *social,* their mean raw score being 36 7, equivalent to the 85th percentile The mesomorphs are highest in *political* value, averaging 39 4, the 91st percentile   The ectomorphs are highest in *theoretical* value, averaging 34 6, equivalent to a percentile score of 77

The reliabilities of the differences between groups are indicated in Table 5, in terms of the critical ratios of the mean differences in Allport-Vernon raw scores between the three morphological groups. The three predominant relationships between Spranger values and morphological components, italicized in Tables 3 and 4, are statistically reliable, while none of the other relationships achieve such significance.

TABLE 5

CRITICAL RATIOS OF MEAN DIFFERENCES IN ALLPORT-VERNON SCORES BETWEEN MORPHOLOGICAL GROUPS

DIFFERENCE BETWEEN	THEO	ECON	ESTH	SOCIAL	POL	RELIG
Endo vs. Meso.	0 19	0 70	0 72	*2 75*	*3 25*	1 02
Meso vs Ecto	*3 62*	1 59	1 85	0 85	*4 47*	0.20
Ecto. vs. Endo	*3 47*	0 85	0 95	*3 69*	1 36	0.71

[12] G W Allport and P E Vernon   *Score sheet for the study of values*   Boston. Houghton Mifflin, 1931

The table of critical ratios also reveals that the differences among the morphological groups in Spranger's values show a pattern similar to the differences Sheldon finds among his temperamental components. Sheldon found a greater difference between somatotonia and cerebrotonia ($r = -.625$) than between somatotonia and viscerotonia ($r = -.315$) or viscerotonia and cerebrotonia ($r = -.39$)[13]. Similarly, we find more nearly reliable differences between mesomorphs and ectomorphs in their Allport-Vernon scores (the mean critical ratio of the differences $= 2.10$) than between mesomorphs and endomorphs (mean $CR = 1.44$) or endomorphs and ectomorphs (mean $CR = 1.84$). The behavior of Allport-Vernon scores thus tends to support Sheldon's findings as to comparisons among the three components.

Correlations between Components and Values To gain some idea of the degree of relationship between Sheldon's components and the Spranger values, tetrachoric correlations were computed

An "average" score on the Allport-Vernon test is 29–30, and the "average" strength of Sheldon's components is three and one-half. For each of the six values, in turn, the entire group of subjects was divided into an "above average" group (scores of 30 or more) and a "below average" group (29 or less). These two groups were then further subdivided into an "above average" group (rating of 4 or more) and a "below average" group (rating of 3 or less) in endomorphy, then in mesomorphy, finally in ectomorphy. From these proportions the tetrachoric coefficients were computed

Thus, each of the 156 subjects enters into each of the 18 correlations, in terms of his position above or below average on each value and in each component. It should be noted, therefore, that in these correlations the group "above average" in endomorphy, for example, may include not only those subjects whose dominant component is endomorphy, but also those of any somatotype rating 4 or more in endomorphy. The correlations are thus in terms of endomorphy, not endomorphs. This fact may account for the occasional discrepancies in rank order of the values when measured by raw score averages and by correlation coefficients

The correlations appear in Table 6. Though most of the coefficients are not high, the same predominant relationships show up rather sharply. Endomorphy correlates 60 with social value. Mesomorphy correlates 72 with political value, which, under the present conditions, is a highly suggestive correlation. The relationship of ectomorphy to theoretical value, $r_t = 58$, is again the lowest of the three, though still considerable.

It is of interest to note, not only those values in which the three component-groups are highest, but also those in which they are

13 W H Sheldon, *op cit*, p. 400

TABLE 6

TETRACHORIC CORRELATIONS BETWEEN SHELDON'S COMPONENTS AND SPRANGER'S
VALUES

	THEO	ECON	ESTH	SOCIAL	POL	RELIG
Endomorphy	— 36	16	00	60	— 03	— 10
Mesomorphy	— 13	31	— 38	— 22	76	— 15
Ectomorphy	58	— 28	43	— 41	— 47	38

lowest To make this picture clearer, we have sorted out the three highest and the three lowest values for each component, as indicated by mean scores and by correlation coefficients These relationships appear in Table 7 The "low" values for endomorphs seem to be theoretical and religious For the mesomorphs, the low values are esthetic and religious And for ectomorphs, the low values are economic, political, and social

These relationships, taken in conjunction with the respective "high" values, seem quite reasonable It is easily credible that the sociophilic, viscerotonic endomorphs should be high in the interest in people and their welfare shown by a strong social value, and low in the more abstract, intellectual quest for understanding typified by the theoretical and religious values Their relatively high esthetic value, perhaps, does not fit quite so well into this picture, but we shall see below that this is in good part the concomitant of ectomorphic interference.

That the ambitious, hardheaded, somatotonic mesomorphs should be strongly interested in power and utility (political and economic values), and relatively uninterested in abstract theoretical and religious values, or the imaginative esthetic values, is exceedingly plausible Again, it is readily understandable that the sensitive, attentive, cerebrotonic ectomorph, with his desire to fit new impressions into the framework of accumulated experience, should be high in the theoretical, religious, and esthetic quests And with his easy dissociation from the "realities," the competitive struggles of life, it is reasonable to find him low in economic and political interests, with their emphasis on utility and power. "Cerebrotonia means that the function of thought is the naturally dominant one "[14] A

[14] W H Sheldon, *op cit.,* p 277

TABLE 7

"High" and "Low" Spranger Values for Each Component

HIGH VALUES		LOW VALUES	
PERCENTILES	CORRELATIONS	PERCENTILES	CORRELATIONS
I Endomorphy			
Social (85)	Social (60)	Theo (39)	Theo (— 36)
Pol (65)	Econ (16)	Rel (41)	Relig (— 10)
Esth (56)	Esth (00)	Econ (45)	Pol (— 03)
II Mesomorphy			
Pol (91)	Pol (76)	Theo (38)	Esth (— 38)
Social (60)		Relig (38)	Social (— 22)
Econ (56)	Econ (31)	Esth (43)	Relig (— 15)
			Theo (— 13)
III Ectomorphy			
Theo (77)	Theo (58)	Econ (35)	Pol (— 47)
Esth (72)	Esth (43)	Pol (47)	Social (— 41)
Relig (54)	Relig (38)	Social (49)	Econ (— 28)

further noteworthy difference appears in the fact that, while mesomorphs are outstandingly high in one specific value (political), with no other values rivaling it, ectomorphs tend to spread their interests over three areas (theoretical, esthetic, and religious). In the light of cerebrotonic "conspicuous mental and emotional versatility," this finding is as meaningful as is the relatively extreme concentration in political interest of the "unidirectional" somatotonics

Relationships with Secondarily Dominant Components   Thus far, we have been speaking of Sheldon's components with reference only to "dominant" components, categorizing each subject in terms of that one of the three components in which he is strongest   It must be remembered, however, that Sheldon's is a component theory, not a type theory, and that the interaction between stronger and weaker components is significant in determining the pattern of individuality   A 613, for example, is a very different person from a 631

There is reason to suspect that this secondary dominance may be associated with variations in the strength of some of the Spranger values.   In Table 8, therefore, we have broken down each of the three component-categories into two subgroups, according to the

TABLE 8

MEAN PERCENTILE SCORES OF GROUPS SUBDIVIDED ACCORDING TO SECONDARILY
DOMINANT COMPONENTS

	THEO	ECON	ESTH	SOCIAL	POL.	RELIG
Ectomorphic-endomorphs	41	27	79	89	42	43
Mesomorphic-endomorphs	38	60	39	79	77	40
Endomorphic-mesomorphs	38	53	43	60	91	40
Ectomorphic-mesomorphs	37	59	44	59	91	35
Mesomorphic-ectomorphs	75	35	72	49	49	52
Endomorphic-ectomorphs	90	21	71	43	30	74

second-highest component of each individual. The table shows the percentile values for the mean Allport-Vernon scores of these subgroups

Complication of endomorphy with ectomorphy appears to bring the economic and political values down considerably, at the same time raising the esthetic value. Complication with mesomorphy seems to reverse these effects, lowering the esthetic value and raising the economic and political values. Since the economic and political values are low for ectomorphs generally and high for mesomorphs, with the esthetic value just the reverse, these "complication effects" make sense

Between the two mesomorphic groups, there are no notable differences   Mesomorphy appears to "override" the interfering components, so that the second-highest components are obscured in their effects. Endomorphy, on the other hand, is perhaps not so "dominant" in effect, leaving room for greater influence by interfering components   Such hypotheses appear to fit in with some of Sheldon's own findings regarding the interaction of components

Ectomorphs with endomorphic interference are higher than mesomorphic ectomorphs in theoretical, esthetic, and religious values, and lower in economic, social, and political values   This gives a definite picture of a rather imaginative and thoughtful personality, weak in the sterner areas of interest. Such a picture agrees quite well with that of the somewhat weak and unaggressive

endomorphic ectomorph as drawn by Sheldon   Ectomorphy, supported by mesomorphy, remains high in theoretical, esthetic, and religious interests, but does not fall below the average in social and political values

CONCLUSION

All in all, the relationships obtained between Sheldon's components of physique and Spranger's evaluative attitudes make good psychological sense.   In the light of the fact that, in dealing with components of physique rather than temperament, we are at least one degree removed from the "primary" variables of personality, as Sheldon sees them, our correlations of .60 to .70 are surprisingly high.   But bearing in mind the fact that, according to Sheldon, physique and temperament are closely related, not only our high correlations but also our low and negative correlations fit together to make a psychologically meaningful picture of patterns of personality and interest   It is gratifying to observe such a degree of coherence between two approaches to the problems of personality   We should, however, sound a cautionary note.   In dealing with means and correlations, one tends to fix his eye on similarities and common trends; the many individual variations in pattern tend for the moment to escape his gaze   While, indeed, the similarities and trends are of interest and importance, it must be remembered that within a given group of subjects, there are many who depart from these statistical norms, and that most will display a pattern at least to some degree unique unto themselves   Perhaps, with more discriminating instruments, we may eventually find that even these apparent deviations are lawful.   With our present methods, however, we must remark the importance of individual variations as well as common trends

The relevance of our obtained relationships between the evaluative attitudes and components of physique to our "three component" theory of leadership traits is readily apparent   Though the data say nothing with regard to success in actual leadership situations, they do support our hypothesis that the approaches of Spranger and Sheldon are meaningfully related, in somewhat the manner which Figure 1 pictures   This suggests that the Allport-Vernon test and Sheldon's technique may eventually be of some value in the selection of leaders and executives

Summary

This paper suggests the thesis that the chief problem in the study of leadership is the discovery of functional relations between various leadership situations and leadership traits or abilities As a conceptualization for empirical investigation, we offer the hypothesis that a "job analysis" of leaders' functions might disclose them as falling into three categories. planning, organizing, and persuading These categories can perhaps best be conceived of as segments of a continuum, such that the job of any given leader might have a "central tendency" in some one segment, but spread also into neighboring areas The three categories or components of leadership, conceived as central tendencies along a continuum, may further be described in terms of the purpose and duties of leadership in each situation, the nature of the activities engaged in, the relation to the products emerging from the leadership situation, and to the people being led

We gathered, from the literature, a list of 135 "traits of leaders," and observed that, inspectionally, they seemed to group themselves into several clusters These clusters, in turn, seemed rather clearly to be related to the three components of leadership functions, and to such approaches to personality as those of Spranger and Sheldon We therefore suggest a three-component grouping of leaders' traits, paralleling that of leaders' functions This hypothesis is expressed in graphic form, postulating theoretical, symbolic interests, and cerebrotonic traits as most valuable in planning activities; political, managerial interests, and somatotonic traits as most significant in organizational activities, and social and viscerotonic traits as most important in persuasive activities

Following up the suggested relationships between Spranger and Sheldon, we made a study of this question by obtaining scores on the Allport-Vernon *Study of Values* and self-ratings on Sheldon's morphological components from 156 subjects The results indicate that endomorphs tend to be high in the social and esthetic values, and low in theoretical and religious values. Mesomorphs are high in political and economic values, and low in theoretical, religious, and esthetic values Ectomorphs are high in theoretical, esthetic, and religious values, low in economic, political, and social values. Relationships with secondarily dominant components of physique

are also analyzed, and are found to be consistent with the predominant relationships   Over all, it is found that the approaches of Spranger and Sheldon agree rather well in giving a coherent and meaningful picture of personality patterns.   This finding, in the light of the present three-component theory of leadership and executive ability, suggests the possible future utility of such techniques in applications to personnel and guidance work.

PSYCHOLOGICAL EXAMINATIONS OF CHILDREN WHO LATER BECAME PSYCHOTIC *

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CLINICAL psychologists and psychiatrists have expressed the opinion that if therapy could be applied early in a developing psychosis the prognosis would be more favorable (3; 4, 14). It has never been demonstrated, however, that there are any dependable methods of detecting children who are likely to develop psychoses as adults or adolescents   Any method of detecting potential psychotics would depend upon a reliable pattern of characteristics that typify "latent" psychoses

Although Bradley has summarized thorough studies of a small number of children manifesting psychotic or near psychotic behavior at an early age, it is still problematical whether the histories of children referred to a psychiatrist at an early age have features in common with childhood histories of persons judged psychotic as adults but not so assayed during their school days (2; 12).

More research is necessary before conclusions can be drawn about the similarity of etiology for the adult and child psychoses. It is yet to be established that childhood psychoses are accelerated forms of the more common adult psychoses (12, 13, 16, 17). While it is of current interest to study schizophrenia of childhood, it must be realized that generalizations about the pre-psychotic behavior based on samples of child schizophrenics should be applied with caution to persons who do not become psychotic until later in life

THE PROBLEM

The purpose of this study is to compare the records of children who were institutionalized later in life for mental disease with a representative sample of the general population referred to a child study bureau of a public-school system.

Children come to the attention of school authorities, and subse-

quently to the attention of the psychologists, for many reasons
misconduct, school retardation, physical defects, and personality
defects. These reasons may serve as clues to differences between
children who later in life became psychotic, pre-psychotic, and those
who have no record of psychosis as adults or children, non-psychotic
Other factors which may likewise be of value in differentiating
between groups are age at the time of the examination, IQ, test
reactions, and recommendations of the psychologist (5)

A comparison of the childhood records with the later hospital
case histories of the institutionalized patients offers a means of
determining the diagnostic and prognostic significance of particular
behavior characteristics.

It can be seen that this study attempts to answer the questions:
"Are pre-psychotic children different from the general population
examined in a school child study bureau?" and also, "What
features of child study records can serve as diagnostic and prognostic
aids in later mental diseases?"

<center>PROCEDURE</center>

To answer the questions raised by this study it was necessary to
secure records of persons who had been institutionalized in a mental
hospital and had been examined in a child study clinic as children
The cooperation of the state mental hospitals of Illinois and the
Bureau of Child Study of the Chicago Board of Education was
responsible for successfully tracing the individual cases comprising
this report.

A total of 657 names of mental patients were selected from the
files of the mental hospital population of Illinois These cases were
selected according to the criterion that they had attended the
Chicago Public Schools after the Bureau of Child Study had been
instituted and was engaged in the examination of children referred
for a great variety of school problems Of this group of mental
patients 38 have records at the Child Study Bureau

These 38 persons had been examined by members of the hospital
staffs, undergone routine laboratory tests, and had a social service
investigation, while in a mental hospital These same individuals
had also been examined by a psychologist at the Bureau of Child
Study when they were children All of the cases reported in this
study were born after 1912.

In contrast to this group of mental cases a control sample of the

general population examined at the Bureau of Child Study was selected in order to furnish a basis of comparison between the pre-psychotic and non-psychotic groups　The records of the 53 individuals comprising the control sample were examined for the same factors as the psychotic group, i e, age, reason for examination, etc Not all of the 53 cases contained information on all items studied For that reason the number of cases reported for any single item is not necessarily equal to 53　Two of the 53 control cases had been referred for mental diseases as adults　There was no indication that the control group was other than representative of the general population examined by the Bureau of Child Study

On the basis of the psychiatric diagnoses made by the staffs of the hospitals, the 38 mental cases were classified into three divisions: (1) cases diagnosed as schizophrenic; (2) cases regarded as constitutional or organic in nature, (including brain disease, paresis, and severe mental deficiency with psychosis),[1] and (3) miscellaneous causes described as psychoneurotic, undiagnosed psychosis, psychotic reaction, etc　No cases of manic-depressive psychosis were found in this group

The following information was gathered from the childhood records. (1) age of the child at the time of the examination; (2) reason for the examination; (3) results of intelligence tests; (4) school grade at time of examination; (5) child's reaction to the psychologist and test situation, and (6) recommendations by the psychologist

In the hospital records, usable data could be found for· (1) age at time of commitment to a hospital; (2) reason for commitment, (3) the patient's hospital adjustment; and (4) prognosis ratings on the Elgin Prognosis Scale

RESULTS

Out of the 657 mental hospital cases 38 or 5 8 per cent had records at the Bureau of Child Study. Since there are no figures available on the percentage of children who at some time in the course of their school careers are referred to the Bureau of Child Study, it cannot be ascertained whether the population studied by the Bureau is significantly weighted with future psychotics. Because both the

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[1] Hereafter the term "constitutional group" will be used to refer to all cases regarded as definitely organic in nature and also those cases regarded as constitutionally inferior, i e, mentally deficient　However, mental deficiency alone is not sufficient to include cases in this category

school population and the facilities of the Bureau of Child Study changed during the period covered by this study, it was found impossible to estimate the proportion of children referred to the Bureau at some time during their school days

The relative similarity of the median years of the examinations, range 1927–1932, indicates that the children were studied at the Bureau of Child Study under comparable conditions and were subject to the same clinical procedures.

Age at Time of Examination. Slight differences appeared in the mean age at which the pre-psychotic and non-psychotic groups were examined at the Bureau of Child Study Since these differences are not statistically significant, we can conclude the age at the time of examination does not differ for the groups studied The pre-psychotic children are not brought to the attention of the Bureau of Child Study at any unusual or characteristic age level

Mean IQ's. This factor appears to have some value in distinguishing between the groups (see Table 1) The following is a summary of the possible comparisons:

I   Significant differences (P<2 per cent) were found between the following
   A   Control group>constitutional group
   B   All pre-psychotic cases>constitutional group
   C   Schizophrenic group>constitutional group
   D   All mental cases<schizophrenic group
   E   The miscellaneous group>constitutional group
II Differences of doubtful significance (P between 2 and 5 per cent) were found between the following
   A   Schizophrenic>control groups
   B   Schizophrenic>the miscellaneous groups
III No significant differences (P>5 per cent) were found between the following
   A   Control group>all pre-psychotic cases
   B   Control group>miscellaneous group
   C   The miscellaneous group<all pre-psychotic cases

On the basis of this summary, it can be seen that the pre-psychotic cases as a group do not differ in intelligence from the general population studied by the Bureau of Child Study Upon breaking the pre-psychotic group up into its subcategories, the miscellaneous mental cases cannot be distinguished from the control group, representing the general population studied by the Bureau. The group classified as constitutional is significantly lower in mean IQ than all other groups studied However, this fact had been somewhat anticipated, since the basis of classification in this group was the

TABLE 1

Significance of Group Differences in IQ's of Children Examined at Bureau of Child Study

	Control Group	All Mental Cases	Schizophrenic Cases	Constitutional Cases	Miscellaneous Cases
Mean IQ	78 4	75 4	88 2	52 6	74 9
σ	12 3	20 7	15 4	18 6	15 0
N	39	37	15	8	14
Median IQ	80 8	75 0	87 5	48 0	73 1
Control Group					
Mean	78 4	78 4	78 4	78 4	78 4
Difference		3 0	9 8	25 8	3 5
P—per cent		44 per cent	4 2 per cent	1 per cent	45 per cent
All Mental Cases					
Mean			75 4	75 4	75 4
Difference			12 8	22 8	5
P—per cent			1 7 per cent	1 per cent	99 per cent
Schizophrenic Cases					
Mean				88 2	88 2
Difference				35 6	13 3
P—per cent				1 per cent	3 4 per cent
Constitutional Cases					
Mean					52 6
Difference					22 3
P—per cent					1 4 per cent

presence of apparent brain impairment   The schizophrenic group is significantly higher in IQ than either the constitutional or all mental cases in general   Chance alone will not explain the higher mean of intelligence scores of the schizophrenic group over both the miscellaneous and control groups

Mean Grade Level   There are no statistically significant differences in the mean grade levels at which the children were referred to the Bureau for study   The mean grades at time of examination range from 3 7 for the schizophrenic group to 2 4 for the constitutional group   It can be concluded that the future psychotic individuals do not become school problems at any characteristic grade level that serves to distinguish them from other children examined

The chi-square test for independence of variance was applied to the differences between the control group and all mental cases for three factors· reason for examination, test reactions, and recommendations of the examining psychologist.

Reason for Examination   Practically all children were referred for school retardation or backwardness. Differences that appear between the control group and the pre-psychotic group can be explained on the basis of chance, *i e*, P=38 per cent.

Test Reaction   There appeared general tendencies that indicated the pre-psychotic children react differently from each other and from the general population examined at the Bureau   When all pre-psychotic cases are considered together as a group they are not significantly different from the control sample, *i e*, P=10 per cent (see Table 2)

The majority of cases in both the control group and the pre-psychotic group exhibited good rapport   In the schizophrenic subgroup more than half appeared apathetic, while in the constitutional subgroup more than half appeared excitable   These two groups apparently tend to have opposite reactions in the test situations. The significance of the reaction type to the psychotic picture is reported later in this study

Recommendations of the Psychologist· Pre-psychotic cases in general do not differ from other children studied in the recommendations of the psychologist, *i e.,* P=36 per cent   There are two features of the recommendations that appear worthy of discussion: (1) No members of the schizophrenic subgroup were excluded from school as a result of the psychological examinations; and

TABLE 2

Early Test Reactions at the Bureau of Child Study

	Control Group	All Mental Cases	Schizo- phrenic Cases	Consti- tutional Cases	Miscel- laneous Cases
Normal, good rapport	12	17	6	3	8
Excitable	5	8	1	4	3
Apathetic	7	9	8	1	0
Other	7	1	0	0	1
N	31	35	15	8	12

Chi-square test for independence of variance between the control group and all mental cases

$$x^2 = 6\ 3$$
$$D\,f = 3$$
P— per cent = 10 per cent

(2) five out of eight constitutional cases were excluded on the basis of examinations

The results are not surprising when it is recalled that the constitutional subgroup had the lowest mean IQ, while the schizophrenic subgroup had the highest mean IQ. This further strengthens the evidence that the schizophrenic subgroup was significantly higher in intelligence than most children studied at the Bureau. Six of the pre-schizophrenic children had IQ's above 90, while five of these six were above 100 In no other group did any single IQ exceed 100 Two cases in the control approached 100 (97 and 99) Out of the five IQ's exceeding 100, "backwardness" was explicitly named in three of them as precipitating the examination, the other reasons being seclusiveness and a "hearing difficulty" It becomes evident that some factor or factors other than lack of intelligence are operating to produce the atypical school careers of the schizophrenic group For this reason it appeared desirable to test the hypothesis that the test reaction might more adequately distinguish between the groups of mental cases than factors examined up to this point

All Bureau of Child Study cases having later records in state hospitals were grouped into three categories on the basis of their test reaction as children, i e , excitable, good rapport, and apathetic.

The difference in the mean IQ of the apathetic and excitable groups borders on statistical significance, i.e., P=2 6 per cent, the mean IQ for the apathetic group being 84 7 as compared to 61.3

for the excitable group The differences between the good rapport group and either the excitable or apathetic groups are not statistically significant The mean IQ of the good rapport group was 81 7.

The mean ages at which the members of the groups, *i e ,* good rapport, excitable, and apathetic, were examined at the Bureau of Child Study are not significantly different (all P—per cent above 40) It can be concluded that the children grouped under the classifications of good rapport, excitable, and apathetic are not referred to the Bureau of Child Study at any characteristic age levels

The mean ages of hospital commitment for the members of the groups classified as to their test reactions differ significantly in one instance· P=1 per cent between the apathetic (17 7 years) and excitable groups (21 8 years) The apathetic group is therefore shown to be committed to state hospitals at a significantly earlier age than the excitable group The mean age at commitment for the good rapport group was 19 1 years

"Backwardness" is the typical reason assigned for the examinations in all three groups The excitable group had four of its eight cases recommended for exclusion from school This is in agreement with the indications that the excitable group was the dullest group examined For seven of the nine cases in the excitable group, some form of unusual social transgression was mentioned in the reason for commitment to a hospital (see Table 3) This appears to be quite different from the good rapport and apathetic groups, in each of which only one case was committed for this particular reason The good rapport group does not appear to differ significantly from the apathetic group in the reason for commitment.

TABLE 3

REASONS FOR COMMITMENT TO MENTAL HOSPITAL AS RELATED TO CHILDHOOD TEST REACTIONS

COMMITMENT REASONS	CHILDHOOD TEST REACTIONS		
	GOOD RAPPORT	EXCITABLE	APATHETIC
Social Transgressions	1	7	1
Excitement	2	0	0
Seclusiveness and Delusions	4	0	6
Other	3	2	2

In both groups seclusiveness and delusions most often precipitated the commitment

To summarize the analysis of reasons for commitment, it appears that the excitable group ran afoul of social disapproval because of general asocial behavior, while the good rapport and apathetic groups were committed for seclusiveness and delusions No member of the apathetic group was committed to a hospital for reason of social transgression. The apathetic and good rapport groups seem to be retiring in their pre-commitment days, while the excitable individuals were outwardly aggressive and expressed themselves vigorously

The excitable group had the best hospital adjustment of the three groups, five out of the nine cases were making a good adjustment (see Table 4) In the apathetic group eight out of nine cases were severely withdrawn in their reaction to the hospital situation. It

TABLE 4

HOSPITAL ADJUSTMENT AS RELATED TO CHILDHOOD TEST REACTIONS

	GOOD RAPPORT	EXCITABLE	APATHETIC
Good Adjustment	2	5	0
Excited	0	1	0
Withdrawn	4	1	8
Other	4	2	1

appears that the excitable group adjusted well in the hospital situation, while the apathetic group could not break away from its characteristic withdrawing type of behavior. No single type of hospital adjustment seems to typify the good rapport group's adjustment. The apathetic group seems to be more homogeneous for this factor than do the other groups

The difference between the mean prognosis scores (Elgin Prognosis Scale, 21) of the excitable and good rapport groups is not statistically significant, P=40 per cent, both mean scores indicating an unconfirmed or indeterminate prognosis (see Table 5). The mean prognosis score of the apathetic group and the means of the excitable and good rapport groups were both statistically significant, P's=1 per cent. Thus, the apathetic group held definitely poorer prognosis than individuals exhibiting excitability or good rapport

TABLE 5

SIGNIFICANCE OF DIFFERENCES BETWEEN MEAN PROGNOSIS RATINGS AS RELATED
TO CHILDHOOD TEST REACTION GROUPS

	GOOD RAPPORT	EXCITABLE	APATHETIC
Mean Prognosis Rating	+2 3	+1 8	+32 3
σ	11 1	16 1	11 3
N	8	8	8
Good Rapport Mean Difference P—per cent		+2 3 5 90 per cent	+2 3 29 9 1 per cent
Excitable Mean Difference P—per cent			+1 8 30 4 1 per cent

in their examinations at the Bureau of Child Study   (Poor prognosis scores on the Elgin scale are those above +25.)

DISCUSSION

From the foregoing results it is evident that the children who will later develop a mental disease of sufficient seriousness to require hospitalization do not differ greatly as a group from other children at the school ages when they were examined by the Bureau of Child Study   However, separating the pre-psychotic cases studied into subcategories based on their psychiatric diagnosis brings to light significant differences in the groups   While it may be true that the pre-psychotic children might distinguish themselves on clinical observations not included in this study, it must be remembered that the purpose of this study was to evaluate the feasibility of detecting pre-psychotic children in a group of children subject to the same circumstances of examination in childhood   It must be pointed out that the purpose of the examinations at the Bureau of Child Study was not to detect mental disease in the children but rather to solve immediate school difficulties   In none of the cases studied was there suspicion on the part of the examiner that the child examined had severe conflicts or would later become psychotic.

"Backwardness" was the characteristic reason for the examination of all children including those in the schizophrenic subgroup   It

is difficult to rationalize the poor school achievement of the schizophrenic subgroup Despite the indications of sufficient intelligence to make at least a borderline adjustment, apparently the general apathy of the schizophrenic subgroup put them under the surveillance of the school authorities for school retardation

The general apathy of some of the children examined, especially in the schizophrenic subgroup, undoubtedly contributed to a lower IQ than would be found under more satisfactory rapport It has been pointed out by Wittman (22) that the state of rapport between the examiner and subject is significant in determining the reliability of the IQ found This is of particular significance in the schizophrenic subgroups, where the superficially dull appearance of the patient makes judgments as to the adequacy of the responses difficult.

Results of the analysis of groups categorized as to their test reaction indicate that the excitable and apathetic test reactions were a basis for a valid differentiation between future psychotic subjects. Comparisons also showed that, for the characteristics studied, the excitable and apathetic groups were at the extremes with the good rapport group found between the means of these two groups An examination of the P values obtained consistently indicated that the differences were more reliable between the apathetic and excitable groups This may be interpreted as an indication that excitability and apathy are clinical extremes of behavior.

The apathetic group was institutionalized at an earlier age than the excitable group The apathetic group was also severely withdrawn in its hospital adjustment, while the excitable group made the best hospital adjustment in the sense of cooperation and good relations with other patients and hospital employees Social transgressions, often in the form of aggressive behavior, typifies the commitment of the excitable group

These findings indicate that an apathetic type of reaction in childhood is a relatively permanent type of behavior and is a forerunner of early hospitalization, poor hospital adjustment, and poor prognosis for recovery in cases developing mental disease

Because the children reported in this study were referred for school problems it is probable that less attention was given to the possibility that serious personal conflicts might be involved than if the children were referred, for example, from an agency dealing with delinquent children The context in which the problem child

appeared undoubtedly determined to a great extent the set with which the psychologist viewed the problems and their ramifications.

CONCLUSIONS

From the results of this study it appears improbable that, with the clinical methods usually employed, the general group of children destined to be institutionalized for mental disease can be distinguished from other children referred to a child study bureau for school problems   Within the group of pre-psychotic cases, however, the children who later become schizophrenic tend to be apathetic in the childhood examining situation and are also more intelligent when compared to the constitutional mental disease group, who are excitable and of lower intelligence   The characteristic reaction of apathy or excitement appears to be relatively permanent in the cases studied   Apathy in the test situation precedes seclusiveness in the pre-psychotic period, a withdrawing type of adjustment to the hospital routine, and a very poor prognosis for recovery.   The cases regarded as excitable or overactive are hospitalized at a later age than the apathetic group   They are also marked by social transgressions in the pre-psychotic period, better adjustment in the hospital, and indeterminate prognosis.   These findings support a view that personality characteristics of psychotic patients are stable and evidence continuous development from childhood.

BIBLIOGRAPHY

1 BERK, A , LANE, L , & TANDY, M C   A follow-up study of 30 habit clinic children who manifested delinquency problems before the age of 10 years   Bull Mass Dept ment Health, 1935, 19, 37–57
2 BRADLEY, C   Schizophrenia in childhood   New York Macmillan, 1941
3 COTTINGTON, F   Treatment of schizophrenia of childhood   Nervous Child, Spring 1942, 2–3, 172–187
4 DESPERT, J L   Prophylactic aspect of schizophrenia in childhood   Nervous Child. Spring 1942, 2–3, 199–231
5 EDWARDS, A S , & LANGLEY, L. D   Childhood manifestations and adult psychoses Amer J Orthopsychiat , 1936, 6, 103–109
6 GLADSTERN, H   The later adjustment of twenty-six adolescents diagnosed as schizophrenic or potentially schizophrenic   Smith Coll Stud soc Work, 1941, 2, 106–136
7 HARTWELL, S W   Study of 25 children presenting the withdrawal type of personality Amer J Orthopsychiat , 1932, 2, 143–151
8 KANNER, L   Problem children growing up   Amer J Psychiat , 1937, 94, 681–699
9 KANNER, L   Early behavior problems as signposts to later maladjustments   Amer J Psychiat , 1941, 97, 1261–1271
10 KASANIN, J , & KAUFMAN, M R   A study of the functional psychoses in children Amer J Psychiat , 1929, 9, 307–384
11. KASANIN, J , & VEO, L   Recognition of mental diseases in children   Amer J Orthopsychiat , 1930, 1, 406–429
12 KASANIN, J , & VEO, L   A study of the school adjustments of children who later became psychotic   Amer J Orthopsychiat , 1932, 3, 212–230

13 KEMBLE, R P   Adolescent pre-psychotic conditions, criticism of a concept. *Smith Coll Stud soc Work*, 1941, 2, 97–105

14 LOUTTIT, C M   Preventive mental hygiene in childhood   *Nervous Child*, 1941, 1, 43–59

15 LURIE, L A, TIETZ, E B, & HERTZMAN, J   Functional psychoses in childhood   *J Amer Psychiat*, 1936, 92, 1169–1184

16 MOORE, T V   The psychotic and pre-psychotic character   *Character & Pers*, 1938, 7, 14–18

17 PATTERSON, R M   The pre-psychotic personality   *Rev Educ Res*, 1940, 10, 460–463.

18 POTTER, H W, & KLEIN, H R   An evaluation of the treatment of problem children as determined by a follow-up study   *Amer J Psychiat*, 1937, 94, 681–689

19 THOM, D, & WINSLOW, D C   A follow-up study of 50 problem children with good prognosis   *Bull Mass Dept ment Hygiene*, 1935, 19, 24–37

20 WITMER, H L, & STUDENTS   The childhood personality and parent-child relationships of dementia praecox and manic depressive patients   *Smith Coll Stud soc Work*, 1934, 4, 341–352

21 WITTMAN, M P   A scale for measuring prognosis in schizophrenia patients   Elgin papers, 1941, 4, 20–23   (From the Elgin State Hospital, Elgin, Illinois)

22 WITTMAN, M P   Characteristic psychographs of mental efficiency for various psychotic and chronological age classifications   A paper read at the Midwestern Psychological Association Meeting, May, 1942, St Louis, Mo

ON AGREEMENT WITH ANOTHER'S JUDGMENTS

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THE tendency to conform with or to imitate judgments of others has been amply illustrated in the literature of experimental social psychology[1] In this paper we shall be concerned with the following problem: Is it possible to obtain, by slight variations of the same experimental set-up, extremes in influences, *i e ,* on the one hand, nearly 100-per-cent conformity, and on the other, nearly zero-per-cent?

The material or evidence to be judged in our experiments consisted of a series of five drawings, each of which was on a grey card, two inches by three inches in size They are here illustrated in the order presented to the subjects.

CARD 1   CARD 2   CARD 3   CARD 4   CARD 5
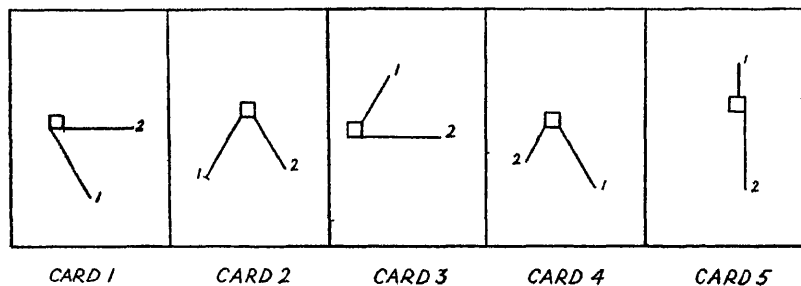
The two lines coming out of each square box are of unequal lengths and jut out of the box at different angles. In every card there is one line which is one inch in length. The other line is 15/16 of an inch in length in Card 1, 14/16 in Card 2, and decreases by 2/16 of an inch in each succeeding card, so that it is 1/2 of an inch long in the fifth card.   .

The drawings were exposed for judgment in the following manner:

Two children were told that the Board of Education was trying out various parts of a new intelligence test in order to determine how children would react to them. The part which they would be given was a vision test. After assuring them that their performance would in no way affect their school grades, we presented Card 1 of the series We asked first one of the children (the reason given for his precedence was that he had entered the room first) and then the other of the pair, "Which of the two lines coming out of the box, line one or line two, is shorter?" They were specifically told not to regard the sides of the box as part of the lines In the same manner, the same child always answering first, we presented the remaining cards of the series.

After the last card the subject who had given his choice first was told to leave the room and the remaining child was given a retrial on all five cards We then questioned him about the choices he had given when the other child had been in the room He was also asked to describe, as well as he was able, his reactions during the experiment He was requested not to inform any fellow pupils of what had taken place during the experiment, since that would make all our work useless After this, he was told to return to his room.

The subject of the pair who had been designated to go first had been taken into our confidence. He made his choices in accordance with instructions received before the other child had entered the room Throughout these experiments we shall refer to the member of each pair who went first as "Subject A," or as "the stooge," and to the subject who answered after the stooge as "Subject B " [2]

As a kind of control experiment, the cards were presented, in a manner similar to that described above, to single individuals The children who served as stooges came from this control group.

All the subjects came from a New York City public elementary school Their ages ranged from 10 to 13, with the largest concen-

[2] In our experiments, the objective correctness of a choice can be determined by reference to the judgment situation itself, the drawings In contrast to the usual experiments on social influences or imitation, our subjects have a basis, evidence, for their judgment To this extent the experimentation of Sherif and of Miller and Dollard *(loc cit)* was to some degree one-sided Max Wertheimer in his graduate seminars has made the point that generalizations from such one-sided experimentation are not conclusive He stressed the need for experimentation under conditions in which subjects have evidence on which to make their judgments Our set-up is in several respects similar to that employed by S E Asch in experiments which have as yet not been published

tration in the 11–12-year level. Their IQ's ranged from 95 to 110, more than half lying between 98 and 107   Subject B served only once; each of the three children who served as stooges participated in three or four sessions of every experimental variation.   We deliberately chose the A subjects so that they were of smaller physical build, and one or two classes lower than the B subjects. The latter were in the 5B and 6B grades, and the stooges were in the 5A and 6A grades   In most instances, A was not acquainted with those who served as B subjects

In every experiment to be described below the announced task was the selection of the shorter line

Each of the ten control subjects readily chose the shorter line in Cards 2 through 5   Card 1 seemed to require more scrutiny than the others—two of the subjects made an incorrect choice here.

In all of the subsequently described experiments, A stated his choice, in each card, before B   In the first group of experiments A always gave the correct answer; i.e., he selected the shorter of the two lines   In the second and third groups, A always gave the incorrect answer, i e , he selected the longer line.   What effect did A's prior choice have on B's in these three groups of experiments? What were the effects of the various methods used to increase agreement with A's true and A's false answer?

I. Subject A Gives True Answers

Initial Experiment

Before B entered the room, A was instructed to select the objectively shorter line   To make certain that he understood his task, we gave him a preliminary trial in the five cards.   B was then summoned into the room and the experiment was administered to both as described on pages 97–98   In every card the A subject chose correctly, i.e , named the shorter line   The majority of the B subjects made the proper judgment, which was the same as the stooges' judgments   Five of the ten children who served as B subjects did not agree with A in Card 1, and two did not agree in Card 2, but instead designated the longer line as the shorter of the two   Thus, there was 50-, 80-, 100-, 100-, 100-per-cent agreement with A in Cards 1 through 5, respectively.

In the retrial every B subject chose the objectively shorter line in

every card   One might attribute the previous mistakes in judgment
in Card 1 (by five subjects) and in Card 2 (by two subjects)—the
two cards with the smallest difference between the lines—to the
subjects' unfamiliarity with the drawings in the experimental session, and their correct choice in the retrial to their better acquaintance with the cards (and the task)   Interviews with the children,
after the retrial, revealed that two of them were surprised to learn
that they had previously erred in Cards 1 and 2   They thought
that they had made no error   These two children had been visibly
nervous and tense at the beginning of the experimental session.   It
may be that they were then in no condition to perceive the small
differences between the two lines in the first two cards   That they
selected the incorrect line may not have been a matter of agreeing
or not agreeing with A but a mistake in judgment   The other three
nonfollowers confessed that they initially thought that they might
"get into trouble" if they followed A, that they would be considered
"cheats" if they copied the answer of the first subject, but the
obviousness of the correct answer in the last two or three cards led
them to select it even though A, too, had chosen it

Attempts to Increase Agreement with A's True Answers

Experiment I—Experimenter Confirms A's Answers

We varied the procedure of the Initial Experiment of this section.
After both had made known their choices on a card, each was
informed whether his selection was wrong or right.   A was always
said to be right.   B was judged to be right only if he selected the
smaller line, i e , if he responded as A had   Eighty, 100, 100, 100,
100 per cent of the ten B subjects gave the same answer as A in
Cards 1 through 5, respectively.[3]

Three children of this experiment, as some subjects of the previous
experiment, responded to the first card with some hesitancy (or
did not give the choice they wished to make), because their answers
were the same as A's   However, when the "right-wrong" verdict
was given after the first card, they saw there was no basis for fearing
to be considered copying.

[3] With this "right-wrong" verdict the influence may not necessarily be due to the stooge,
but the experimenter from whom the verdict comes

Experiment II—Clarifying Evidence· Parallel Line Drawings Used

In line with the results of the Initial Experiment we can expect to find more agreement with A's response if the difference between the two lines is made to appear more striking

We used a new set of five cards in which the two lines to be judged, although of the same lengths as in the former set, were parallel to each other and only 1/16 of an inch apart, so that differences in lengths were more obvious to the eye We did find more agreement Only one of the 19 B subjects disagreed with A in Card 1 On a percentage basis, there was 95-, 100-, 100-, 100-, 100-per-cent agreement in Cards 1 through 5, respectively The one case of disagreement apparently was due to the fear of being caught cheating. Here, too, some hesitated to make known their first choices because they agreed with A's

Experiment III—Clarifying Evidence Means of Measurement Given

In order to obtain agreement in every card, we varied the set-up of the Initial Experiment in still another manner Each subject was given a strip of cardboard and shown on an illustrative card how to mark off on it and compare the lengths of the two lines

This time, every one of the ten B subjects gave the same (correct) answers as A. It seemed to us that they answered with less hesitancy and more assurance than did most of the subjects in the other experiments That A had given the same answer seemed neither tempting nor disturbing to the B subject, but was as it should be, since both had measured the same lines

II SUBJECT A GIVES FALSE ANSWERS

Initial Experiment

Before B entered the room, A was instructed to select the *longer* of the two lines and to refer to it as the shorter He was given a preliminary trial in the five cards When the B subject came into the room the experiment was administered exactly as in the Initial Experiment of the previous section Although the A subject made an incorrect selection in each of the five drawings, of the 13 B subjects, one gave the same choice as A in every card, two in Cards 1 and 2, one in Cards 3, 4, and 5, and one in only Card 5 Thus, 23, 23, 15, 15, 23 per cent gave the same answer as A in Cards 1 through 5, respectively

In the retrial every B subject selected the objectively shorter line in every card To understand the difference in results, we must be aware of the difference between the two situations. Now, B was confronted by the two lines to be compared Formerly, he had in addition to face a choice made by another child, a choice at variance with the objective facts

Observations of the subjects during the experiment and discussions with them after the retrial revealed that most of them, whether or not they agreed with A, were somewhat worried and made ill at ease by his consistent and apparently confident selection of the longer for the shorter line Some subjects tried to understand A's choices, to find some reasonable explanation for them One child, who had disagreed with A in Cards 1 through 4, found a satisfactory reason for agreeing in the fifth card. When this card was presented to him, his face brightened and he said, "Line two (A's choice) is smaller I get it now." We asked him, "What do you get?" He answered, "It's like this Line two (tracing line two) is smaller than line one" (tracing line one and line two), *i e*, the sum of the two lines is greater than the longer line. Another child began to doubt his understanding of the instructions, and began to believe that the assigned task was the selection of the longer line, and therefore agreed with A in the later cards A third told us that he had succeeded in looking at some cards from such an angle that the lines which A had selected actually looked shorter to him

Attempts to Increase Agreement with A's False Answers

Experiment I—Experimenter Confirms A's Answers

The procedure employed was that of Experiment I of Section I. After both children had made known their choices on a card, they were told who was right and who was wrong In each card, A selected the longer line for the shorter one, and each time he was judged to be right. B was called right if he selected the same line as A, and wrong if he did not. Now, 10, 10, 40, 60, 60 per cent of the ten subjects followed A in Cards 1 through 5, respectively. The largest amount of agreement occurred in the last two cards, where A's answer was strikingly incorrect The increasing agreement with A might be due to the experimenter's constant confirmation of the correctness of A's false answer.

Experiment II—Foretraining in Ambiguous Drawings

We attempted to increase agreement by training the B subject to follow A in a preliminary set of cards The series consisted of 15 cards in each of which the two lines to be compared were actually equal in length, but one could be viewed as shorter than the other because of the angles at which the lines left the box The A subject selected in each card the line which had been most often judged *longer* by six control group subjects An announcement of right or wrong was made after every card The A subject was always called right, the B subject only when he agreed with A After the 15 cards had been judged, we told B that he would be granted another chance to see if he, too, could get 100 per cent on the test The series of 15 cards was repeated until B showed 100-per-cent agreement, after which the usual five cards were presented

Let us consider the number of times the preliminary training series of 15 cards had to be presented before complete agreement was secured:

1 Two of the 20 subjects agreed in every card on the second presentation.

2 Twelve agreed on the third presentation.

3 Five agreed on the fourth presentation

4 One would not agree even after eight presentations His persistence was rewarded—we did not bother him anymore

When the usual five cards were then presented, without any announcement of right or wrong, the 20 subjects gave 95-, 85-, 75-, 70-, 60-per-cent agreement.

In the retrial (when A was out of the room) on the usual five cards, all B subjects chose the actually shorter line Discussions with them revealed that they had previously given the same answer as A in the usual cards because:

1. In the preliminary series they had grown to rely on A; they had grown accustomed to giving the same answer that A gave

2 In the first two or three cards they agreed with A because they thought that he could see better than they, or because they had some ideas about how his selection might be correct.

3. Somewhere in the middle of the preliminary series they had begun to think that their task was to select the longer line since A

was selecting the longer line, or since they wanted to be "right," or they just did it—"I don't know why" A few believed that the last few cards constituted a new pack in which one had to select the longer line

A few subjects told us that in Card 3 (or 4) they suddenly realized that the line which A had selected and which they were about to name was obviously longer than the other From then on, they were on their guard not to rely on A

Experiment III—Foretraining in Drawings of Decreasing Clarity

Before presenting the series of parallel line cards of Experiment II of Section I we gave the subjects a preliminary series of parallel line cards with the instructions to select the shorter line The preliminary series consisted of 20 cards In the first card the difference between the two lines was one inch but in each succeeding card the difference decreased until in the last card the two lines were equal. In the first 19 cards A made the correct choice—the *shorter* line Although the two lines were actually equal in the twentieth drawing, A designated one of them as the shorter Let us first report on what happened in this preliminary set Every one of the 14 B subjects gave the same choice as A in Cards 1 through 19 In the twentieth card, 10 agreed with A's incorrect selection, one insisted that both lines were equal in length and made no selection, and three chose the line which in the judgment of A was longer. We shall not discuss here whether the choices made by the latter subjects can be attributed to chance factors or to the tendency not to copy (mentioned in the Initial Experiment of Section I) We are interested in determining whether the subjects who followed A even in the last card of the preliminary series, would continue to follow him in the five test cards, wherein A selected the objectively longer line and referred to it as the shorter.

The 10 B subjects showed 100-, 10-, 60-, 40-, 40-per-cent agreement with A, in the five parallel line cards [4] In the retrial on these cards, when A left the room, all B subjects selected the shorter line in every card. The comments made by the subjects were similar to those cited in the previous experiments

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[4] Of those who did not agree with Subject A in the last card of the preliminary series, the one who had insisted that the lengths of the lines were equal, agreed with A in Card 1 but not in the remaining four cards, the other three subjects disagreed with A in every one of the five test cards

*Experiment IV—Successive Retests and Insistent Challenge to Get
    100 per Cent*

In order to obtain 100-per-cent agreement in every card, the set-up
of Experiment I of this section was varied as follows. after we had
indicated who was correct in the fifth card, subject A was told,
"You have 100 per cent" To the B subject we said, "What is the
matter with you? Can't you get 100 per cent on such an easy test?
I'd hate to put this mark down on your record card It's not a
passing mark Well, I'll give you another chance" If B did not
show 100-per-cent agreement on the second presentation of the
cards, we again gave him "another chance," and again and again
until he agreed with A in every card.

How many times did the 10 B subjects have to be given the five
cards before they agreed in all? In which cards did they hold out
the longest?

Three gave complete agreement in the second presentation, six
needed from three to five presentations It was in Cards 4 and 5
that they stuck to the correct answers the longest One subject did
not agree even after six presentations; we gave up.

This experimental situation appeared to produce a strained atmos-
phere As the B subjects who did not agree with A were repeatedly
judged to be wrong, most of them grew quite tense, some took
more and more time per trial, others proceeded very rapidly; their
hands quivered as they held the cards, and the cards soon became
spotted with perspiration "Why am I wrong?" some protested,
"The line I chose is the smaller line" They stared at the experi-
menter as if to appeal the verdict Some began to doubt whether
they understood the task. "Am I supposed to pick the shorter or
the longer line?" But after a while, with a resigned attitude, and
obviously not quite happy, most of them repeated A's answer.
Those who needed many re-presentations before they agreed with
A, carefully and cautiously examined the cards, turned them over
to search for clues on the reverse side, whispered the correct judg-
ment to themselves and deliberated on it, then mournfully exclaimed,
e.g., "Maybe my eyes are no good," or mocked themselves, "I must
be blind" They bit their lips in exasperation and nervousness.
When they announced the objectively correct answer they did so
in a bold, determined voice or in a sad, apologetic manner. Finally,
they gave in. In the retrial, after A left the room, every subject
chose the shorter line in each of the five drawings.

In the discussion period the children told us that they had repeated A's answer because· "He was always right and I wanted to be right", "If I said what my eyes saw, I was wrong If I said what he said, I was right. It was a test and I wanted to be right"; "When you said 'big' I thought of 'small' and when you said 'small' I thought of ' big ' "

III ATTEMPTS TO DECREASE AGREEMENT WITH A's FALSE ANSWERS

Experiment I—Clarifying Evidence Parallel Line Drawings Used

In order that the difference between the two lines would stand out more clearly, we used the parallel line cards of Experiment II of Section I. Subject A always selected the longer line Only, 10, 10, 10, 30, 30 per cent of the 10 B subjects agreed in Cards 1 through 5, respectively The slight increase in Cards 4 and 5 is explained by the comments of two subjects. Their remarks revealed that they became increasingly puzzled by A's consistent selection of the wrong line and finally developed hypotheses (similar to the Initial Experiment of Section II) which made A's answers seem proper to them

In the retrial all chose the smaller line in every card The subjects' explanations of why they had previously agreed with A were similar to those made in the Initial Experiment of Section II.

Experiment II—Clarifying Evidence Means of Measurement Given

This time the usual five cards were employed but, as in Experiment III of Section I, the A as well as the B subjects were furnished with a strip of cardboard and each was shown on an illustrative card how to mark off on it and compare the lengths of the two lines. Thus, the B subjects were armed with a standard on which to base their measurements Again, A selected the *longer* line in each card. Of the 10 B subjects, two agreed with A in Card 1, one in Card 2, but none in Cards 3, 4, and 5. There was 20-, 10-, 0-, 0-, 0-per-cent agreement with A in Cards 1 through 5, respectively.

As in the previous experiment, all selected the objectively shorter line in the retrial.

The comments of the two B subjects who had originally agreed with A in Card 1 revealed that they were worried when they found that their selections did not correspond to A's. They believed that they probably had made a mistake in measuring and that A was correct. In each of the subsequent cards one line was obviously so

much shorter than the other that they were certain that their measurements were correct The one B subject who had agreed with A in Card 2 had made an error in his measurements.

The comments of the B subjects who did not follow A indicated that most of them reacted to his response by more careful measurements "What is wrong with your eyes?" they asked A, "Can't you measure? Do you need help?" When one line was decidedly shorter than the other and A still called out the incorrect answer, they began to suspect a catch or trick of some kind, or thought that A was "trying to be funny" One or two subjects appeared to be not at all concerned with A's choices

We have seen that most of our subjects, even those disturbed by A's answers, relied on their measurements for their choices and did not follow him Because they had no satisfactory way of interpreting A's responses, a few children at first followed his inaccurate selections

Experiment III—Clarifying Evidence Means of Measurement and Admonitory Story

The method of the preceding experiment was modified Before they were given Card 1 to judge, the children were told this story:

"On oral tests it sometimes happens that a child knows the correct answer, but when he is called upon to recite, he overhears someone else, changes his mind, and gives the wrong answer Why does this happen?"

After the B Subjects attempted a reply (A had previously been told to refrain from answering), we continued, "Yes, sometimes it is because the boy or girl is not so sure of his answer In this test I want you to be sure of what you say Therefore, I am going to show you how to measure the lines."

The children were then given a strip of cardboard and shown how to use it to compare the lengths of the two lines Then the usual series of five cards was presented in the usual manner. A called out the incorrect line in every card None of the 10 B subjects agreed with A. All gave the correct answers. They were at first amazed at A's responses, gazed at him with astonishment or pity, and offered to show him how to measure

In our discussion with the children it appeared that the introductory story put them on guard When A chose the longer line in the first card, some thought he had made a mistake in his meas-

TABULAR SUMMARY OF RESULTS

EXPERIMENT	A's JUDGMENT IN CARDS 1 THROUGH 5	PERCENTAGE OF B's AGREEMENT WITH A IN				
		CARD 1	CARD 2	CARD 3	CARD 4	CARD 5
Section I						
Initial Experiment	True	50	80	100	100	100
Attempts to Increase Agreement						
1 (Right-Wrong)	True	80	100	100	100	100
2 (Parallel)	True	95	100	100	100	100
3 (Measurement)	True	100	100	100	100	100
Section II						
Initial Experiment	False	23	23	15	15	23
Attempts to Increase Agreement						
1 (Right-Wrong)	False	10	10	40	60	60
2 (Foretraining in Ambiguous Series)	False	95	85	75	70	60
3 (Foretraining in Unambiguous Series)	False	100	100	60	40	40
4 (Challenge to Get 100 per cent*)	False	90	90	90	90	90
Section III						
Attempts to Decrease Agreement						
1 (Parallel)	False	10	10	10	30	30
2 (Measurement)	False	20	10	0	0	0
3 (Measurement Plus Story)	False	0	0	0	0	0

urements As he persistently selected the longer line they realized that it was a trick to make them forget the moral of the story and copy A They tried not to listen to him or just ignored his responses They were sure that they were right because they had measured the lines. It would seem that the story had developed in the children an adequate attitude with which to meet A's remarks.

SUMMARY AND CONCLUSIONS

An individual was given the task of selecting the shorter of two lines in each of five cards Prior to judging each of the pairs of lines, he heard another child (A) make a selection In one experiment A's choices were always correct. All but a few subjects agreed with him In another experiment A's judgments were always incorrect. The majority of the subjects disagreed with him These were the initial experiments.

We varied the set-up of the initial experiments—the aim being to obtain 0- and 100-per-cent agreement—by employing two types of means:

1. "External means"—adding the experimenter's appraisal "right" to A's answers, "wrong" to the disagreeing judgments of the subjects, foretraining to develop "following", direct challenge to get 100-per-cent agreement, with repeated retrials

2. Means in the direction of clarifying the evidence presented for judgment—using parallel lines; furnishing a means of measuring; clarifying the possibility of being misled

When A's judgments were correct, 100-per-cent agreement was readily obtained [5] When A's judgments were incorrect, 0-per-cent agreement was readily achieved The goal of 100-per-cent agreement with A's incorrect judgments was not reached, although large increases were obtained It seemed more difficult to secure agreement when A's choices were false Most subjects appeared to be guided by the lengths of the lines, the evidence, and it was not easy to overcome this tendency.

Although our results do not permit of any real decision, we have the impression that the efficacy of the means of type "1" was, on the whole, less than that of the means of type "2."

[5] Still lacking are experimental variations which will bring about 0-per-cent agreement with A's correct judgments Our preliminary attempts to do this—by calling A's choices "wrong"; by admonishing the subject not to follow, and by foretraining not to follow—resulted in little, and, in the last three cards, no disagreement Further experimentation with other procedures is necessary in order to attain the aim of 0-per-cent agreement

Whether or not subjects were influenced by A's judgment seemed to depend on the obviousness of the correct answer, *i e ,* the clarity of the judgment-situation, on the truth or falsity of A's judgment, and also on the subjects' attitudes to and interpretations of their task and the experimental situation [6]

We observed that in those experiments wherein A chose the longer for the shorter line, many of the subjects were seriously concerned with his responses Even some of those who did not agree with him were somewhat disturbed or perplexed by his answers Many subjects wished to know why A said what he said, they tried to understand on what basis he made his selections. A few even assumed that their task was to discover a way of seeing the lines as the other fellow saw them. Some subjects seemed reluctant to disagree with A, apparently not because they wished to imitate, but because they believed that there might be some basis for A's choice which they were overlooking. It is interesting to study what there was in the make-up of the situation or of the subjects that caused them to consider A's response before making their own judgments and did not permit them to disregard his judgment or lightly to dismiss his answer as incorrect and as an absurd response.

Throughout this paper we have used the words "agreement" and "following" to describe what happened when a subject gave the same judgment as A But not all cases of "agreement" were psychologically identical. Only a few subjects blindly repeated the same response as A without judging the lines for themselves It is this kind of behavior which is often called to mind by the term "imitation." We found only few individuals who showed such blind, irrational imitation of A. Many subjects who agreed with A did so on a rational basis, because they found a satisfactory reason

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[6] We want to mention one feature in the results which may be a specific topic for further experimentation In many of the experiments the clarity of the difference in length between the two lines played a positive role In the experiments of Section I disagreements with the correct answers occurred only in Cards 1 and 2, not in Cards 3, 4, and 5 In Experiments II and III of Section II the influence of the foretraining decreased from Cards 1 through 5 This was not the case in Experiments I of Section II where, under the influence of the consistent appraisal by the experimenter, the values of agreements with the false judgment increased from Card 1 to Card 5 Also, Experiment I of Section III showed such an increase, whereas in Experiment II of the same section we see again the increase of correct judgments in successive cards The reason for the direction of the results in Experiment I of Section III is not clear, it may have been due to changing attitudes in facing the stooge's misleading judgments (as in Experiment I of Section II) In all this there seems involved the problem of the interplay of external factors (*e g ,* attitudes, interpretations) and the evidence presented for judgment

for agreeing, on the basis of which A's selection appeared to be correct   Other subjects agreed with A only in form, only superficially, because they wished to be "right," because the teacher (experimenter) threatened them with failure on the test unless they agreed; actually, they were aware that A's answer was false   When A's judgments were correct, what might have appeared to be agreement with A was mostly, in truth, not "agreement"   It was a conclusion separately and independently reached by the subject, which happened to be the same as that given by A   To lump all these phenomena under the one heading of "following" or "imitating" is to lose sight of the important differences among them   Closer analysis reveals that actions, all of which on the surface may be viewed as cases of imitation, may have very different psychological bases.   It may be that to apply the blanket term of imitation to all cases of apparent following is not a wise procedure

SHORT ARTICLES AND NOTES

INCREASING PUBLIC UNDERSTANDING OF INFLATION [*]

BY HADLEY CANTRIL AND GERARD B LAMBERT

Princeton University

THIS study was designed to illustrate a systematic way of thinking and method of procedure with respect to public education   Obviously, the democratic system functions effectively in proportion to the enlightenment of its citizens on problems touching their welfare   But, at the same time, attempts to find out what people really understand about basic questions and attempts to improve their understanding have so far generally been spasmodic or haphazard   In this experiment we tried to find out what might be expected of an educational campaign that attempted to increase public understanding of a complex and common problem

We chose the problem of inflation for our test [1]   And since inflation is such a broad and ramified subject, we deliberately narrowed our subject here to only one aspect of inflation—its cause   If people can learn what causes inflation, then they are provided with certain basic standards of judgment by means of which they can more easily see the consequences of inflation and recognize the steps necessary to control it   They can give meaning to one set of circumstances which they must react to as citizens

Our problem reduces itself, then to two questions   First, how well do people understand the cause of inflation, second, how much can this understanding be increased?

THE METHOD

The method used here was simply (1) to determine the understanding of the cause of inflation in one community, (2) apply educational pressure in that community, and (3) retest for the effects of the educational campaign.

First Survey   The city of New Brunswick, New Jersey (population of approximately 33,000), was chosen for the experiment since it was accessible and since the managing editor and the publisher of the local newspaper generously cooperated in the experiment [2]   During the first week of July, 1943, a carefully selected, representative sample of the adult population was surveyed   Eight hundred ninety-nine people were interviewed   Since the results of this survey were to be compared with those on a second survey, added precision was given to the sampling by dividing the city into seven relatively homogeneous districts and assigning interviews accordingly   In addition to control by districts, interviewers in each district were given an assignment according to income, age, and sex   Five trained interviewers were employed in the first survey

Considerable experimentation was necessary before a satisfactory question was found to measure the understanding of the cause of inflation reliably   Open-ended questions were impracticable since comparatively few people ventured an explanation of the cause of inflation, since cause was confused with effects, and since a rigid classification of explanations for later comparison purposes was impossible   The question finally adopted was of the quiz variety where respondents were carefully told what we were trying to find out and then handed a card from which they were to select one of the three alternatives as the correct explanation of the cause of inflation   Two of the alternatives (A and C) were false

(Question)

There is a good deal of talk these days about the danger of inflation   Here is a card giving three reasons often mentioned as causes of inflation   Please read these over carefully and tell me which one describes best what *you* think is the real cause of inflation   I'm not trying to find out what you think inflation *is,* but what you think *causes* it

(Card)

WHICH IS THE CAUSE OF INFLATION?

A   Prices go up faster than wages are increased
B   There are fewer things for people to buy and at the same time people have more money to spend for those things
C   The government has to use so much food and material for war purposes here and abroad that there is very little left for us to buy

In addition to this question, the ballot contained a few questions of current interest to start the interview, some questions about the regularity with which the local newspaper was read, and the usual background information for control and matching purposes

The Educational Campaign   Since we were trying to reach the adult population of the city, the most practical method of doing so seemed to be to use the local newspaper which, in our sample, is read by approximately 90 per cent of the residents

The chief problem was to attract attention to the message we were trying to get across   We had determined on the use of a full page message in large type   But a message about the cause of inflation as such would make dull reading   So our educational campaign was couched in the context of a prize contest and the headlines of the page announced awards of a $50 first prize, a $25 second prize, a $10 third prize, and 23 $5 prizes to the winning participants in the contest sponsored by the *Daily Home News*   It was run three times in one week (July 12, 14, and 16)

Every attempt was made in the lay-out of the page to point up the basic message—the cause of inflation

To attract attention the announcement of prizes was set in bold type and the basic message of the ad—the two points explaining the cause of inflation—were set in the middle of the page in type more prominent than any other part of the message

Second Survey   The second survey was made the week following the appearance of the page on inflation   Since re-interviewing the same people contacted on the first survey would have been prohibitively expensive, it was imperative to obtain as comparable a cross-section as possible to that of the earlier poll

Assignments were again made on the basis of distribution by districts with the controls of income, sex, and age   However, to increase precision, interviewers reported by telephone at the end of each day's interviewing just what types of people they had managed to find   Their reports indicated the income, sex, and

THE DAILY HOME NEWS IS OFFERING 26 CASH PRIZES IN AN IMPORTANT CONTEST

First Prize $50; Second Prize $25; Third Prize $10

And Twenty-three $5 Prizes

Read Every Word of This Page Carefully and Learn How You May Win One of These Prizes

The Daily Home News has decided by means of a contest to help increase the public understanding of one of the most vicious and dangerous economic possibilities a nation can face. That possibility is uncontrolled inflation

To control inflation successfully it is necessary that every citizen understand clearly its major cause Its disastrous consequences, and the methods for its control It is our hope that this contest will undo many misconceptions about the real cause of inflation. Even for those who do not wish to enter the contest we urge that each citizen read this page carefully as a patriotic duty

This contest has no strings—no ifs—no buts—nothing to buy

On this page the major cause of inflation is explained The explanation is confined entirely to the cause of inflation If this contest can start a movement to make the cause of inflation clear we will have won the first round in the battle against this menace With other communities following our example, a national understanding of the true cause of inflation would go far to ward off disaster

TO WIN A PRIZE, DO THIS

Read below, over and over, the major cause of inflation under present conditions When you understand the explanation clearly write a letter (100 words or less) to the Contest Editor of The Daily Home News, stating in your own words the major cause of inflation DO NOT REPEAT OUR WORDING Express the same thing differently in your own way

REMEMBER THIS—This contest is NOT concerned with the description of what inflation is. NOR is it concerned with the cures for inflation. That is something for the future Stick to a description of the major cause.

The cost of jury will award a whole prize of $50 to the best letter a prize of $25 for the next best letter and a prize of $10 for the third best letter. In addition to these three prizes, the judges will select the 23 next best letters and will ward $5 for each. The decision of the jury in all be final, and the letters shall be the property of The Daily Home News. No letter will be returned if it is mailed after midnight, Sunday July 18th.

Now we will give you in our own words this major cause of inflation. Be sure to read it carefully

In the United States, as a result of the war, there are two existing conditions which could cause inflation now   These conditions which provide the MAJOR CAUSE OF INFLATION are

1.—There Is More Money to Spend—But
2.—There Are Fewer Things to Buy

In those 13 words we have explained to you the real cause of inflation. There are of course many incidental causes but the conditions we have described in those few words are the basic conditions which make inflation inevitable unless some controls are put into effect.

Here's a Rough Example of What We Mean

A rough example of a set of conditions which would cause inflation (unless we had some controls) is as follows If the salaries and wages received in New Brunswick as a whole were to double and at the same time the number of things we could buy were cut in half we would have the major cause of inflation

Our shift to enormous war production has resulted in having fewer things for civilians to buy and at the same time a tremendous increase in total wages and salaries.

The understanding of the real cause of inflation is the first step necessary for our people if they are to cooperate fully with the various measures needed to ward off ruinous inflation If we know in advance the things that will cause a disaster we can act intelligently to prevent that disaster None of us wants to see the time when we must pay $100 for a pair of shoes, $1 for a loaf of bread, or 50c for a newspaper

A Tip and a Warning

You can be sure this page will start lots of discussion about the major cause of inflation. You'll find that many of your friends—being human—will want to show their knowledge by asking if you know its answer. Be prepared. Read every word of this page carefully so people won't catch you uninformed.

NO CATCH!

There is no catch to this contest—no expense but a postage stamp. It is open to everyone but the employes of The Daily Home News The contest is conducted as a public and national service. The citizens of New Brunswick, along with the rest of the nation will suffer if disastrous inflation comes Understanding the major cause is the first step in preventing it. This newspaper considers it a duty to spread that understanding. This contest is our method of doing so

ADDRESS YOUR LETTER TO:

CONTEST EDITOR

Daily Home News

NEW BRUNSWICK, N J

age of each respondent Then, when their reports had been examined and com-
pared to the cross-section in a given district as obtained from the first survey, their
general initial assignment was made more specific and they were told before they
went out the next day just what people to interview This meant, of course, that
on the last day or two of interviewing, almost every interviewer was looking for
respondents definitely marked by three characteristics of income level, age, and
sex Six interviewers were used for the second test

In addition to the questions run on the first ballot, this survey asked if people
had noticed the announcement about inflation and, if so, whether they had read
it carefully, only glanced at it, or not read it at all

National Survey In order to gauge the extent to which adults all over the
country understood the cause of inflation, a nation-wide cross-section of 1200 people
was asked the same question at the time the first New Brunswick survey was
under way

RESULTS

The first New Brunswick survey indicated that only 30 per cent of a repre-
sentative adult population in that city was able to select the correct alternative
describing the cause of inflation

TABLE 1

RESULTS OF FIRST NEW BRUNSWICK SURVEY

A	Prices go up faster than wages are increased	41 per cent
B	There are fewer things for people to buy and at the same time people have more money to spend for those things	30 per cent
C	The government has to use so much food and material for war purposes here and abroad that there is very little left for us to buy	7 per cent
Don't know		18 per cent
Qualified answer		4 per cent
		100 per cent

That ignorance about inflation is not confined to New Brunswick is indicated
by the results of the national survey which found only 41 per cent of the adult
population able to select the correct alternative The discrepancy between the
New Brunswick and the over-all national figure is no doubt due chiefly to the large
concentration of foreign-born industrial workers in New Brunswick

In the second New Brunswick survey 43 per cent reported that they saw the
full-page announcement, while 10 per cent said they read it carefully, the rest only
glancing at it

To test the effectiveness of the announcement, then, it was necessary to compare
this 10 per cent of the sample population to equivalent groups drawn from the first
survey, or from those in the second survey who had not noticed the announcement
at all, or who saw it but only glanced at it In order to construct groups as nearly
alike as possible for comparative purposes, each person who indicated he had read
the announcement carefully was matched with respect to education, income, sex,
age, and readership of the *Daily Home News* with another person in each of three
groups (1) a group chosen from the first survey, (2) a group from the second

survey who had not read the announcement, and (3) a group from the second survey who had only glanced at the announcement

When the understanding of the cause of inflation is compared among these four groups, we find that the number who understood the cause of inflation was almost doubled among those who had read the announcement carefully, when compared to the group taken from the first survey, or a similar group taken from the second survey who said they had not seen the announcement   Whereas 63 per cent of those who had read the announcement carefully were able to choose the correct alternative, only 33 per cent of a comparable group in the first survey could make the right choice   This difference is significant   A difference of only 17 per cent would be likely to occur by chance but once in 100 times

TABLE 2

COMPARISON OF THOSE WHO READ ANNOUNCEMENT CAREFULLY WITH OTHER GROUPS

GROUP	PERCENTAGE UNDERSTANDING CAUSE OF INFLATION
Those who read announcement carefully	63
Group taken from first survey	33
Those from second survey who had not noticed announcement at all	34
Those from second survey who had only glanced at announcement	44

The fact that only 10 per cent of the population (90 per cent of which said they read the paper regularly) actually read the page carefully indicates that, even with the announcement of the prize contest, the campaign did not enjoy any widespread coverage of the total population   The result was that the over-all shift (3 per cent) in the direction of a better understanding of the cause of inflation in the total representative population was small and statistically insignificant   This is a problem of appeal, however, which could be easily solved if the facilities of radio, motion pictures, cartoonists, etc, were brought into play   The discovery that only 10 per cent of the population read the page carefully in no way detracts from the significant finding that the understanding of the cause of inflation—among those who did read the announcement carefully—was nearly doubled

INTERPRETATIONS

1   This study indicates that public understanding on a complex problem can be measurably increased   The fact that only a minority of people understood the cause of inflation and that this number was almost doubled among those who paid attention to the announcement shows that so far little systematic effort has been made by official sources to help people give meaning to the complex problems faced by citizens in a democracy, especially during wartime

2.   If nation-wide campaigns, using the motion picture, the radio, cartoons, etc, were skillfully designed, if tests were made before, during, and after these campaigns, there is little doubt that public understanding of many important problems could be significantly improved   A systematic, rifle-shot approach to information

problems, as contrasted to a scattered, shot-gun approach, would save millions of dollars and help a democratic government fulfill the responsibilities it has of informing its citizens about problems affecting their welfare

3 The social psychologist should properly be able to assume increasing responsibility in helping national and local officials discover where there is public understanding and public ignorance, design effective educational appeals, and then, on the basis of evidence obtained from test cases, launch more extensive campaigns of public enlightenment

PSYCHOMETRIC SCATTER PATTERN AS A DIAGNOSTIC AID *

BY WILLIAM A HUNT AND HARRY J OLDER

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THE fact that an individual's performance will vary on the different subtests of any given test battery has long been known   Where this variability is great it can often be traced to some neuropsychiatric disability in the individual being tested, and the hope has arisen that this variability or "scatter" may be of use in detecting the presence of psychopathy   The interest in this subject has become so great that in revising the manual for his adult intelligence test, Wechsler (3) has included a chapter on the diagnostic possibilities of scatter   While past studies have shown a reliable relationship between psychopathy and variability in performance on intelligence tests, even indicating the possibility of a correlation between specific qualitative patterns of scatter and specific types of psychopathy, the relationship remains somewhat tenuous   Statistical trends rather than exact relationships have been established   At present it might be better to speak of scatter as being *indicative* rather than *diagnostic*   The purpose of the present paper is twofold first, to investigate the possibilities of scatter as an indicator of psychopathy in a situation involving a much briefer intelligence test and a much wider range of subjects than is usually found, secondly, to discuss some extraneous, nonpsychopathic factors which are responsible for scatter and which seriously attenuate any statistical relationship which may be established between scatter and psychopathy

During the routine neuropsychiatric examination given each incoming recruit at the U S Naval Training Station, Newport, Rhode Island, recruits suspected of low intelligence are referred to the psychologist for testing (3)   A brief individual intelligence test requiring only 8 to 10 minutes is then administered   This test battery has been described at length elsewhere (1)   It is not used as a basis for discharge from the Service, but merely as a preliminary screening procedure for selecting those recruits needing further study on the observation ward   The battery consists of four subtests the Revised Kent Emergency Test, consisting of 10 questions sampling information and reasoning ability, a Verbal Opposites scale, an Easy Directions test, and an Arithmetical Reasoning test   The Revised Kent Emergency Test and the Verbal Opposites scale are given as verbal tests without any time limit   Easy Directions and Arithmetical Reasoning are administered as written tests with a two-minute time limit   The tests are the work of Grace Kent   Their present use and combination in this battery are the responsibility of the Psychiatric Unit at Newport   It is this brief intelligence test which forms the basis for our study of scatter   Since the score on each subtest is handled separately and may be translated into a representative mental age, scatter, or variability among the subtest scores, is easily noted   For the purposes of this study, significant scatter was arbitrarily defined as an intertest variability of more than two years in mental age

For example, if a subject tested at a mental age of 10 on the Kent Emergency Test, 9 on Verbal Opposites, 12 on Easy Directions, and 10 on Arithmetical Reasoning, he was considered to have shown scatter   In a large group of subjects on whom complete records of the testing were available there were 642 cases showing this amount of scatter   These 642 cases comprised the experimental group   The control group consisted of 200 cases from the same source that did not show scatter   They may be considered to constitute a normal sample, as they were selected by taking consecutive cases whose last names began with the letter C

For the present study only those recruits who were discharged for neuropsychiatric reasons were considered as exhibiting any psychopathy   Since each of these men received thorough study on the observation ward and was seen by a minimum of three staff members, the diagnoses may be considered as valid   In considering the results of this study, however, it should be kept in mind that not all of the subjects showing scatter were studied on the observation ward   Some of them received merely the preliminary psychiatric examination and were sent to duty as fit on this basis

The first question to be considered is the percentage of recruits showing scatter who were discharged for neuropsychiatric reasons   Of the group of 642 subjects showing scatter, 177 (26 6 per cent) were discharged for psychiatric reasons   Table 1 gives the distribution of diagnoses on these men   Of the control group of 200 subjects not showing scatter only 19 (9 5 per cent) were discharged for

TABLE 1

NEUROPSYCHIATRIC CLASSIFICATION OF 642 RECRUITS SHOWING PSYCHOMETRIC SCATTER

DIAGNOSIS	NUMBER OF CASES
Psychopathic Personality	83
Organic Involvement	37
Schizophrenia	31
Psychoneurosis	17
Chronic Alcoholism	7
Manic-Depressive Psychosis	1
C P I with Psychosis	1
	177
No Psychopathy	465
Total	642

neuropsychiatric reasons   There were roughly three times as many neuropsychiatric cases in the "scatter" group as in the control group   The difference is statistically reliable, since the critical ratio (D/σ_d) is 4 55   Thus, scatter on our brief battery may be indicative of some neuropsychiatric disorder   It seems better to say "indicative" rather than the stronger "diagnostic," since 73 per cent of the cases showing scatter were not discharged   The best conclusion is that if scatter appears on the test battery, a careful psychiatric examination is warranted

The relationship existing between various types of scatter and the different forms of psychopathy was also studied   As Table 1 shows, three groups—the psychopathic personalities, the organic cases, and the schizophrenics—are sufficiently large to

warrant statistical treatment The organic group included epileptic, post-traumatic, and encephalitic cases The psychopathic personalities included all the various types of this constitutional disorder It should be noted that most of the schizophrenics were not severe cases necessitating hospitalization The relationship between type of scatter and diagnosis was investigated by comparing the mean mental age for each group on the four subtests of the battery Table 2 gives the means and standard deviations for the performance of each group on the four subtests Table 3 gives the critical ratios of the differences between these means Plus and minus signs before the critical ratios indicate the direction of the differences between the means, using the left-hand column as a reference base

TABLE 2

MEAN MENTAL AGE AND STANDARD DEVIATIONS OF THE THREE NEUROPSYCHIATRIC
GROUPS ON THE FOUR SUBTESTS OF THE NEWPORT BATTERY

		E G Y	VERBAL OPPOSITES	EASY DIRECTIONS	ARITHMETIC
Psychopathic Personality	Mean	11 00	10 58	11 42	11 16
	σ	1 62	1 73	1 42	1 65
Organic Involvement	Mean	10 46	10 57	10 35	10 59
	σ	2 20	1 46	1 64	1 79
Schizophrenia	Mean	10 74	10 74	11 10	10 71
	σ	1 79	1 64	1 53	1 64

The only statistically reliable difference shown Table 3 is for the psychopaths The performance on Easy Directions is better than on Verbal Opposites, and the critical ratio of this difference is 3 23 If one considers not merely those critical ratios which are large enough to be reliable but also those smaller ones which indicate a trend, the organic cases still show no important differences, but the psychopaths and schizophrenics show a tendency to perform better on the written than on the oral tests

In order to investigate this last finding more carefully, the scores on both written tests were combined and compared with the combined score on the oral ones The schizophrenics were a bit better on the written tests, but the critical ratio of the difference is only 60 The organics show no difference The psychopaths, however, are distinctly better on the written tests The difference is reliable, with a critical ratio of 3 64 This statistical difference is backed up by our clinical experience with the battery, which has indicated that scatter of this type is very valuable in detecting the psychopathic personality We are not able to demonstrate the basis for this difference, but it is worth noting that any oral test demands more rapport with and social response to the examiner than does a written test It is in their social relationships that the psychopaths are notoriously inadequate, and it may be this, reinforced by relatively less cooperation and voluntary effort, that explains the

TABLE 3

CRITICAL RATIOS OF DIFFERENCES BETWEEN MEANS FOR NEUROPSYCHIATRIC GROUPS
ON FOUR SUBTESTS OF THE NEWPORT BATTERY

		VERBAL OPPOSITES	EASY DIRECTIONS	ARITHMETIC
Psychopathic Personality	E G Y	+1 62	—1 68	— 64
	Verbal Opposites		—3 23	—2 23
	Easy Directions			+1 04
Organic Involvement	E G Y	— 25	+ 24	— 28
	Verbal Opposites		— 61	— 05
	Easy Directions			— 62
Schizophrenia	E G Y	0 00	— 88	+ 07
	Verbal Opposites		— 92	+ 08
	Easy Directions			+1 00

Plus or minus ratios indicate plus or minus differences between means, with the left-hand column as reference point Thus, for the psychopathic group the mean performance on the Verbal Opposites test was lower than that on Easy Directions, the difference having a critical ratio of 3 23

difference It should be noted, however, that even in this last instance there is not a one-to-one relationship between psychopathy and test scatter Scatter remains indicative rather than diagnostic We may conclude that, even on a brief battery such as this, scatter is a valuable adjunct to other diagnostic procedures

Our work thus bears out previous studies in the field One may ask, however, in view of the continued demonstration of the relationship between test scatter and psychopathy, why the relationship remains a general one, a trend, rather than a more exact relationship The answer is that scatter is not a function of psychopathy alone Only if psychopathy were the sole factor producing scatter could we expect a one-to-one diagnostic relationship In reality, however, there are many other causal agents which may distort performance on the individual subtests of a battery We should like to discuss some of the factors producing scatter on our particular test Our remarks will be clinical and empirical, not based on a statistical analysis, but they may attain significance in the light of our wide experience with this battery During the last year alone, it has been given to more than 10,000 subjects drawn from all sections of the country

Performance on an intelligence test is a function not only of native ability but of cultural environment and educational background as well The validation of

an intelligence test is usually carried out on a large group of urban school children where these factors are fairly constant for the group   This is fine when one is dealing with groups, but the clinical psychologist is left at a loss when handling the individual deviant   If a man suffers from an extreme educational handicap, or has had an unusually poor cultural environment, his past performance may not represent his true native ability, and these factors in his background may produce a test scatter which is not related to psychopathy

Historically, arithmetical reasoning has stood up well as a test of intelligence This has been true of the test included in our battery, but we have found that it presupposes a certain amount of educational background in the subject if it is to work   Many of our educationally handicapped recruits fall down disproportionately on it   This produces a type of scatter that can be understood only of it is evaluated in the light of the subject's education   Another type of scatter is found when the arithmetic reaches a level *above* some of the other tests   We have found evidence that in some deteriorated cases arithmetical reasoning of the simple sort found in this test resembles vocabulary ability in resisting deterioration   Thus a schizophrenic showing some impairment may obtain both a Verbal Opposites and an Arithmetical Reasoning score above those obtained on the other subtests   Its diagnostic value is clouded somewhat by the fact that we also have found a tendency for arithmetic to be disproportionately higher in adults whose intelligence borders on feeblemindedness or is that of a high-grade moron   For the adult of marginal intelligence, survival in a competitive world apparently demands that the ability to do simple arithmetic be developed beyond the general performance level usual for this group   This fact again must be kept in mind in evaluating an arithmetical performance that is above that shown in other tests

Easy Directions, since it involves some reasoning and is timed, often demands more speed and initiative than the schizophrenic can give it   Many simple schizophrenics will score low on this   Since it is a written test, and must be read by the subject, it will also be difficult for the educationally handicapped and those with specific reading disability

We have mentioned that Verbal Opposites often resists deterioration, since it leans heavily on vocabulary ability   Unfortunately a high Opposites score with the other scores lower may represent a specific language facility as well as deterioration   We have tested a large number of men from the educationally underprivileged areas of the Southeastern United States   It was interesting to find a group tendency for them to score higher on Verbal Opposites   Undoubtedly, for some cultural reason these men were characterized by a verbal facility   It would hardly do to assume they all showed evidence of deterioration   Often the Verbal Opposites score is low in relation to the other tests   Severe psychotics and severe organic cases in particular may find it impossible to grasp the concept of "oppositeness"   Psychotics, psychoneurotics, and the emotionally unstable may free associate to the stimulus words and do poorly as a result   Before one can use this as an indicator of psychopathy, it is necessary to rule out the cultural factor, as a poor cultural environment will in itself often drive the score down.

The revised Kent Emergency Test has shown itself to be the one test in our battery that is most free of educational and cultural influences, but even here we find disturbing factors   Two of the ten questions, carrying one-fifth of the possible credits, depend upon a knowledge of the points of the compass   This is a fairly universal bit of knowledge for American adults, but occasionally one runs across "compass-blind" individuals who are unduly penalized by this fact

The most significant scatter pattern on our battery has been shown to be the

difference between oral and written performance in the psychopathic personalities These cases tend to show a better performance on the written tests of the battery, but this same result can also be produced when the examiner fails to secure adequate rapport with the subject being tested   This pattern is typical not only of the psychopathic personalities, but of some normal individuals tested by untrained examiners who fail to use the test skillfully   Once again we find scatter as a function of two factors, one of which must be ruled out before the other is held responsible for the resulting scatter

We must remember that the standardization and validation of our tests are on a statistical basis and represent group trends which are representative of the majority of the population sampled, but do not give an adequate picture of the individual deviants to be found in the group   When one of these "deviants" is met with, the examiner is at a loss if he follows the standard norms in his interpretation   Unfortunately it is just these deviants that furnish the main material for the clinical psychologist

If tests are devised in which scatter is a sole function of some specific factor in pathology, then this scatter will be *diagnostic* rather than *indicative*   In the meantime, since scatter is a function of numerous factors, it is impossible to set hard and fast rules for its interpretation and to provide infallible statistical norms for its recognition   Scatter remains indicative, and any subsequent diagnosis must come only after a careful clinical evaluation of the subject, his history, and his background

In conclusion, we have shown that, even with a brief screen test of the sort described here, scatter is a valuable indicator of psychopathy   Patterns typical of specific abnormalities are present   Rigid standardization, however, is not possible, and an intelligent and careful evaluation of each case is still a necessity

REFERENCES

1 HUNT, W A, WITTSON, C L, HARRIS, H I, SOLOMON, P, & JACKSON, M M   Psychometric procedures in the detection of the neuropsychiatrically unfit   *Naval Med Bull*, in press

2 WECHSLER, D   *The measurement of adult intelligence*   Baltimore   William & Wilkins, 1941 (rev ed)

3 WITTSON, C L, HARRIS, H I, HUNT, W A, & SOLOMON, P   Neuropsychiatric examination of recruits at the U S Naval Training Station, Newport, R I   *War Med*, 1942, 2, 944–951

REVIEWS

EDITED BY EDNA HEIDBREDER

PSYCHOLOGY FOR THE FIGHTING MAN   Prepared for the fighting man himself by
   a committee of the National Research Council with the collaboration of Science
   Service   Washington   The Infantry Journal, 1943   Pp 456

Psychology for the Fighting Man is exactly what its name implies   The content
is general psychology   It was written by psychologists but not for psychologists,
"it was written for the soldier, the soldier who will read a book"   Its style is
vigorous and its vocabulary nontechnical   Principles and problems are presented
in a clear and concise style   Illustrations of these principles are drawn from the
soldier's own experience and problems   It is, in short, a "popular" book that is
supposed to acquire none of the odium psychologists sometimes attach to popularity

Boring (*Psychol Bull,* 1942, 40, 60-63) has described the discussions in the
National Research Council's Emergency Committee in Psychology of the need for
a textbook in military psychology, of the decision to prepare such a volume, and
of the work of the subcommittee appointed to direct the work—Boring, Langfeld,
Bingham, G W Allport, Guthrie, Col E R Munson, Jr, and Marjorie Van de
Water   The members of the subcommittee and all others who have worked on
the book have contributed their time entirely without remuneration   Published
without expectation of profit, it sells for twenty-five cents   The small royalties
have been assigned to the Division of Anthropology and Psychology of the National
Research Council

The subcommittee in charge farmed out to a number of collaborators most of the
job of preparing the original manuscripts   These collaborators, fifty-nine in all,
included non-commissioned and commissioned officers ranging in rank from
Corporal to Brigadier General, psychologists in military service or employed as
civilians in various war agencies, academic and applied psychologists, and repre-
sentatives of allied fields

It was these men and members of the NRC committee themselves who wrote the
first drafts of the manuscripts which, combined and revised, became *Psychology
for the Fighting Man*   All of the original manuscripts were reviewed and criticized
by members of the NRC committee in charge   All manuscripts were then gone
over by Boring, the editor-in-chief, who criticized them from the standpoint of
psychological accuracy as he rewrote them, and by military experts who checked
their military accuracy   The result in terms of psychological content is sound
The book could be used as collateral reading in a general course   I have used it as
part of the reading material assigned to an Army Specialized Training Program
class in personnel psychology with two purposes in view—to point out applications
of psychological principles to military problems and to serve as a brief preview of
topics covered more fully in other assignments   Most of the members of this
rather highly selected class considered the book too oversimplified and lacking in
detail for their purpose and interest   But these soldiers, like professional psycholo-
gists, are not representative of the large group for whom the book was written

The content is general psychology   The book opens with an introductory chapter
called "Psychology and Combat"   Then follow 151 pages on sensation and percep-

tion, 25 pages on tests and individual differences, 44 pages on learning, 41 pages on efficiency, and 163 pages on personality and social problems (morale, the soldier's personal adjustment, mobs and panic, psychological warfare, etc) But many of the topics found in the more usual textbooks are missing Thought, emotion, and imagery are not given separate treatment in *Psychology for the Fighting Man,* historical reviews of false leads and unsuccessful attempts to solve psychological problems, statistical formulae, animal studies, mazes and nonsense syllables, suggested readings, review questions are all absent There is, however, a quite long and detailed index

The psychological reader may hope to find information here on current research or new discoveries He will be disappointed The book is definitely not a summary of recent work With very few exceptions, it could have been written five years ago The professional psychologist will, however, find many illustrations of the application of psychological principles to wartime problems Some of these will be new to him

Since the manuscripts as they were originally written varied in style, in vocabulary, and in difficulty, they were all revised and rewritten by E G Boring and Marjorie Van de Water The rewriting has erased all individual peculiarities of the original authors, smoothed out variation in style and difficulty, and given the volume a very un-textbook-like flavor For example, under the heading "Mental Danger Signals" occurs this paragraph

> Another thing to look for is any sudden change in the soldier's own personality If he is a man who has been in the outfit for a while, it is easy to note a complete reversal of habits or attitudes When the ordinarily cheerful man becomes moody and depressed When the quiet orderly soldier becomes boisterous and noisy and a disciplinary problem When the neat, well groomed man becomes dirty and disheveled—lets his shoes go unshined, his uniform unbuttoned, hair uncombed When the dependable man goes AWOL, starts drinking hard These things are signs of mental trouble They should be looked into The guard house may not be any help at all—sometimes it even makes things worse (p 355)

Few psychologists could write such a paragraph, many would object to it But no one can claim that its meaning is not clear And that, in writing for a popular audience, is more important than is the inclusion of all the exceptions, cautions, and hedgings that could have been in the paragraph It is a credit to the authors and editors that there are so few places in which the academic psychologists will want to say "But that isn't always true, sometimes it is this way " Most of the statements are sound psychology in spite of the inevitable oversimplification of a popular work

DAEL WOLFLE

University of Chicago

THE PSYCHOLOGY OF MILITARY LEADERSHIP By L A Pennington, Romeyn B Hough, and H W Case New York Prentice-Hall, 1943 Pp ix+288

In the preface the authors state that this book is intended to help the officer-in-training to acquire a "more thorough knowledge of men and how to direct them," that it is to provide him " with certain principles of action to which he may turn for the solution of those military problems pertaining to the human element "

The authors make rather good use of marginal and center headings to outline their material Each chapter is ended with an adequate summary and a bibliography divided into military and psychological references There is a glossary at the end that should be useful to the officer candidate who has an inadequate background in psychology

The authors state that military psychology is to be regarded as an applied science, a problem of human engineering Carrying out this theme, the authors devote the second and third chapters to a rather detailed analysis of the officer's role as a teacher The material is the familiar rules to new teachers We should study and plan the lesson we are to teach, we should not only tell the facts, but also be sure the men see why these facts are significant for them, we should have the men actually practice, we should evaluate their performance constructively

In the fourth chapter there is an analogous discussion of the officer as a learner Again the material itself is familiar to psychologists under such titles as "How to Study" The treatment is adequate and should be useful It is especially in these three chapters that the arrangement of subheadings serves to emphasize several specific suggestions that should be of use to the officer candidate

The chapter, "Officer as Leader," is a reasonable discussion of the traits that have been assigned to leaders, with frequent reminders that many great leaders have conspicuously lacked one or more of these traits In the chapter entitled "Officer as Disciplinarian" the authors appeal to historical reference and anecdote instead of detailing specific methods and procedures The three chapters "Officer and Adjustment to Military Service," "Officer and His Men in Battle," and "Officer and Army Morale" recapitulate the field of mental hygiene with application to military problems The chapter headed "Officer as Personnel Technician" attempts to discuss in twenty-seven pages the various tests used in the Army, test interpretation, job analysis, interviewing, and personnel records—and still leaves almost four pages for a sample rating scale

It is the impression of the reviewer that the authors have assembled much material that should be useful to the officer-in-training It is not new material, but it has been rephrased in a manner that makes it easy to apply and is, therefore, worthy of serious consideration by the officer candidate who has a limited background in psychology

There are a few points where the reviewer would take issue with the authors There seems little need to add "applicatory method" to an already overburdened technical vocabulary On the other hand, there would seem to be need for some proof of the assertion that if a man is required merely to salute "   repeatedly many times a day, respect for proper authority becomes so impressed upon his mind that it would require more of an effort to disobey an order than to obey it" And the reviewer would be happier if less space had been devoted to the formalities of discipline and more to the problems of the officer as a personnel technician, and to the problems of his adjustment to military service

It is to be hoped that the military atmosphere of the book will not prevent it from being referred to in other fields The problems of training foremen and of training some types of teachers are closely allied to the material in the book

<div align="right">HOWARD R WHITE</div>

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A SOCIAL PSYCHOLOGY OF WAR AND PEACE   By Mark A May   New Haven Yale University Press, 1943

The past few years have seen an encouraging trend away from isolationism among the psychologists The tradition of the ivory tower may not have been abolished, but at least it has been shaken Problems of war and peace have been given competent professional treatment by Durbin and Bowlby *(Personal Aggressiveness and War)*, by Franz Alexander *(Our Age of Unreason)*, by E C Tolman *(Drives toward War)*, and now by Mark May

Knowing May's background, we expect this book to be focused around matters of education and learning, and this expectation is confirmed. It was natural that Tolman's work should include a considerable amount of infrahuman data, May, for equally obvious reasons, has relied heavily on his experience with children and the schools. Yet this is not just another book about formal education. Most of the instances of learning with which the author is engaged are at present extra-curricular, in a better-planned school system, some of them might be important parts of a course of study.

May of course rejects the instinct theory. Along with it he discards any suggestion that the Germans (or Japanese) are inherently more inclined to be aggressive than any other national or racial group. "Peace and war are products of learning," he asserts firmly. Developing this thesis in careful detail, he examines such forms as learning to hate and to fight, learning to fear and to escape, learning to love and to defend, and learning to follow leaders. Most of these forms of learning, one notes immediately, are so important, so outstanding, that most books on learning—even on psychology in general—ignore them completely.

The treatment as a whole reflects the influence of what is now coming to be known as the Yale School—stimulus-response analysis of learning, frustration-aggression analysis of dynamics. As May points out in his "Acknowledgments," he has been significantly influenced by the staff of the Institute of Human Relations. At the same time, the synthesis and general framework is clearly his own. As an example of theory deliberately applied to a major social problem, the book is an outstanding success.

The view of "psychological conditions of peace" between nations is that the conditions of peace within the group must be extended to cover the entire human race. This will include methods of controlling aggression, and methods of achieving group solidarity. Aggression, he says, can be controlled by social sanctions against violence, legal sanctions, and institutions which minimize frustrations and offer harmless outlets for aggressions. Group solidarity is furthered by patriotism, group identification, and social conscience. It is clear that a program for durable peace must attempt to apply all of these on a global scale. First of all, some kind of supranational government which can make some minimum laws, and enforce them, will be needed. It is both possible and desirable to initiate this organization before hostilities cease.

There were two points on which I felt some dissatisfaction with the book. As a psychologist, I had the impression that the dynamic factors involved remain rather pale and colorless—mere intellectual reflections of the "blood and guts" of emotional frenzy that must be accounted for in assessing the causes of war. As an educator, I felt that the book was accessible to an audience far too limited in numbers. By vocabulary and style it restricts itself to college professors and college students. While education at the higher level is urgently needed, I think—and May's analysis indicates—that there is a still more pressing necessity for influencing an audience possessing less verbal facility.

These negative considerations are far outweighed by the positive values of the book. It presents a highly competent interweaving of theoretical psychology, education, and politics. The analysis is sufficiently detailed to make clear certain points where practical work can begin. At the same time it avoids lapsing into arid details of technique. All psychologists should read it, and they should employ such persuasive or compulsive powers as are at their disposal to have it read by students, colleagues, and friends.

ROSS STAGNER

Dartmouth College

PERSONALITY AND SOCIAL CHANGE· ATTITUDE FORMATION IN A STUDENT COMMUNITY
Theodore M Newcomb   New York   Dryden Press, 1943   Pp x+225

This book reports a study carried on for almost five years while the author was a member of the staff of Bennington College   The report is sponsored by the American Council on Public Affairs   The specific problem concerns the interaction among and between students of traditionally conservative backgrounds and an institution of avowedly liberal outlook, these interaction phenomena are set on the larger stage of social change through the decade of the thirties

The report is unusual in at least two respects   It is informally and interestingly presented, though in some chapters the reader tends to become lost in the complexity of the data and categories   More importantly it is purely a social psychological investigation, longitudinally designed and aimed at the understanding, prediction, and control of molar behavior in the vital area of personality and attitudinal development

The author's general problem may be paraphrased   individuals tend to assimilate or reject societal changes in terms of their dominant values, any closely-knit community has certain well-defined communal values to which the individual's dominant values must be adjusted in some degree, such a community therefore tends also to mediate the individual's reaction to larger and more remote societal changes   Breaking down the problem more specifically within a community so defined, the author says   "What kinds of personal characteristics, in any student community, determine those social relationships which in turn lead to varying reactions to proposed social changes?"   It is important to notice one implication of this phrasing   attitudes toward societal change tend to be either a by-product or end-product of personality patterning

In the fall of 1935, all students were circularized regarding participation in a four-year study of attitude change, involving interviews, paper-and-pencil questionnaires, and (unbeknown to the students) analyses of clinical data available in the personnel records   Participation throughout the study was high   Attitudinal questionnaires were limited to public issues   political and economic progressivism (an adaptation of Stagner's scale to measure fascist attitudes), the CIO, the Supreme Court bill, the Spanish Civil War, etc   The Stagner scale was used at least once each year and was the primary measure in the study

Part II discusses the quantitative data   Chapter 4 deals with overall changes, showing both longitudinal and cross-sectional trends in the direction of less conservatism   Chapter 5 relates these changes to assumed parental attitudes, stability and homogeneity factors, form of item, and scores on the same scales given to other college populations   Chapter 6 shows the pervasive nature of the community effect by the absence of clear-cut relations between major fields of study and attitude scores, the relations of the Allport-Vernon *Study of Values* and progressivism are also included here, showing the significance of the social value in differentiating more and less progressive groups   Chapter 7 describes an interesting basis of comparing self-estimates with estimates of the prevailing community attitude, new students overestimate the conservatism of the upperclassmen, and seniors overestimate the conservatism of the freshmen   Chapter 8 shows the attitudinal correlates of groups having more and less prestige in the eyes of the community and groups deemed more and less desirable as permanent friends   The prestige-endowed and the sought-after groups tend to consistently greater progressivism   The "guess who" technique is adapted in Chapter 9 as a device to identify extreme personality characteristics, which in turn are related to progressivism or conservatism   Those personalities judged to be best adjusted within the community turn out to

be more progressive Chapter 10 deals with retest responses of graduates and former students, showing a systematic persistence of attitudes that is unusual in view of the conservative communities to which the individuals presumably returned

Part III is given over to analysis of case data from interviews and clinical records, in an attempt to trace farther the personality and developmental patterns involved in attitude formation In Chapter 13, cases are first grouped as conservative and nonconservative, then as negativistic or cooperative in the community (on the basis of "guess who" results), and finally as aware or unaware of their degree of progressivism (on the basis of their estimated divergence from the responses of their classes) The resulting eight groups are qualitatively analyzed Level of aspiration, social self-confidence, previous social success, independence, and parental relationships, as seen in the interview and school records, emerge as differential factors among the original eight categories The attitude changes springing from the interaction of these factors are later discussed as autonomous manifestations, much as Allport defines functional autonomy

Part IV summarizes and discusses the results Here the author develops his hypothesis of objective limitations of adjustment—the boundaries set by the known values in a defined community—and subjective limitations of adjustment, the boundaries set by the individual's capacities for adjustment—as interacting determinants not only of degree of acceptance but also of degree of assimilation of social change

Nine appendices contain technical data regarding the various measures used Sampling data and methodological information are also included in these appendices

It is difficult to criticize this book by ordinary standards For example, the numbers of cases are extremely small for some of the generalizations, yet to preserve intact the important community emphasis, small samples were inevitable The atypicality of these cases and of the community is an essential feature of the study, yet atypicality is accompanied by theoretically greater possibility of error in individual judgments, which may restrict considerably the generalized conclusions of the study Statistical tests of differences among the crucial small samples are not presented, since the significant qualitative data are not readily amenable to such treatment It is here that the reviewer feels the author's case is weak, for he has purposely avoided the use of some standardized measures which would have permitted quantification of what are now only provocative clinical insights and abstracted case summaries The author's postulation of a generalized progressivism, as found among this atypical sample, is not borne out in the literature of attitude measurement through wider samples

These comments, however, should not be permitted to detract from the overall value of the report The author's major hypothesis stands up satisfactorily in the data, he has furthermore applied social and clinical psychological techniques to an important field in an ingenious manner

JOHN G DARLEY

Student Counseling Bureau,
University of Minnesota

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DOCTOR IN THE MAKING THE ART OF BEING A MEDICAL STUDENT By Arthur W Ham and Mary B. Salter New York Lippincott, 1943 Pp xii+179

The authors, a histologist and a psychologist respectively, wrote this book as a result of their experience in counseling medical students at the University of Toronto. The rising standards and expanding contents of the medical course, the "truly appalling amount of information placed before the medical student of today,"

make it "extremely difficult for any to become competent doctors save those who possess minds skilled in learning" The book undertakes to tell its readers how to become competent medical students

The first chapter invites the reader to scrutinize his motives for studying medicine Not love of drama, not an overflowing humanitarian feeling, not ambition or the urging of parents can guarantee success with the medical curriculum, but rather an intelligent curiosity which is always asking how things are built and how they work, how birds fly and fish breathe, why people behave differently, how chemical reactions take place   This valuable chapter should be read by all prospective medical students and by all who advise them

If the requisite kind of curiosity is present, then the student must recognize the more immediate enemies of success and learn how to defeat them   He must discern a dangerous "fifth column" in his mind, his conditioning to look upon study as a boresome task   If the basic sciences sometimes seem remote from ultimate practice, he must remind himself how often the foremost men in his profession have regretted their lack of scientific foundation   He must practice to outwit the "time-swindler," inattention   He must learn to organize his knowledge and his note-taking, the professor "will not be satisfied if your examination answers are no better organized than his lectures"   Several chapters contain sound advice on memory, on using references, on cutting through the underbrush of medical jargon, on reviewing, and on the allocation of time   All this is presented with a happy combination of literary qualities   dignified and homely, business-like and amiable, didactic and humorous, profitable and pleasant.

Two chapters, it seems to the reviewer, fall short of the high standard   One of these, on "understanding and applying the scientific method," is devoted to pointing out pitfalls likely to occur in reasoning about scientific data   However important this topic, it belongs in the body of each and every medical course, at whatever point a pitfall is under foot, it should not stand as an isolated and inevitably dull lesson

The other chapter, called "Your Child-Self," is designed to help the student recognize and overcome obstacles within his own personality   Obviously this is the most difficult task attempted in the book   The baffled student will gladly receive advice on how to study, but when it comes to changing some feature of his personality he is as likely as not to side against his adviser   The authors begin well with their picturesque account of the child-self, tied up with feelings and emotions, annoyingly immune to adult reasoning   But thereafter the presentation, just where it should be most diplomatic, appealing, and vivid, becomes instead schematic and abstract, tempting the student to mobilize intellectual resistances rather than coaxing him to perceive the need for a change   This is largely because the authors organize their account around the "ratio of realizations to demands," showing first how demands can be changed, reduced, or relinquished, then how realizations (or achievements) can be increased, always with the idea of giving a higher value to the fraction   Besides tending to throw the discussion back into the realm of contemporary, conscious decisions, thus blotting out whatever insights the account of the child-self must have stirred, this scheme has the further disadvantage that every statement must be balanced by its opposite   demands, for example, should sometimes be reduced but yet never placed too low.   "Try to develop your potentialities as fully as you can," the authors advise, "but face the facts about their limits.   You should not set your demands beyond them if you hope for adequate realization   On the other hand, do not go too far and underestimate yourself.   Excessive humility will be no help to you"   Is any increase of

self-understanding likely to follow from such sliding statements? Much of the difficulty could have been avoided by resisting the charm of fractions and sticking to the more subtle theme of the child-self In this way the chapter might have been kept at its original level of sympathy and saved from the flat indiscriminate moral exhortations to which it presently descends "do not overindulge" in day-dreaming, "do not wallow in your emotions," "never indulge in an orgy of self-pity" These healthy-minded statements will appeal only to healthy-minded readers, who do not need them The authors have not solved the problem of helping maladjusted students to get from the printed page some inkling of a working insight that will help them to better their lives

These shortcomings of two chapters weigh lightly against the virtues of the other nine The authors want medical students to grow broadly, to develop not only medical skills but "a sensitive personality as well, one that is skilled in the art of perception", they consider it "the responsibility of every medical student to become a cultured, civilized person," who, moreover, appreciates the "cultural value of his knowledge" and who dares use it "as a leaven for community opinion" They picture the physician of the future, like the old country doctor, as "someone more progressive and yet more tolerant than the average person" To the larger enterprise of producing such physicians their book will make a worthy contribution

ROBERT W WHITE

Harvard University

GOALS AND DESIRES OF MAN A PSYCHOLOGICAL SURVEY OF LIFE By Paul Schilder
New York Columbia University Press, 1942 Pp xii+306

This is the first of two volumes published by the Paul F Schilder Memorial Committee after the author's death in 1940 Together with Schilder's previous book *The Image and Appearance of the Human Body* and a subsequent posthumous volume *Mind Perception and Thought in Their Constructive Aspects,* it sets out to give a comprehensive system of dynamic psychology and to summarize methodically the author's amazingly extended scientific work

Human experience in Schilder's definition is a constant effort at construction and reconstruction (Construction is one of Schilder's basic concepts and was elaborated in the book on the Body Image it implies a series of intentional, goal-directed, mental or motor acts) The life history of each individual is based upon the specific qualities of his ego and the connections established between his experiences in the course of his development Yet "no individual can have a sense of perception, an experience of his own body and still less a life history, outside of social contacts." *Aggression* is produced primarily by parental rejection and restrictive overattention and is soon tied up with sexual strivings which tend to seek out the protrusions of the body (e g , arms, genital) for their expression If these strivings are checked by parental prohibitions, they may be turned back into passive attitudes which, in contrast, tend to emphasize the cavities of the body Aggression may be produced for a number of reasons, most important among them deprivation—that is, the denial of any craving—and restriction of the child's motility However, aggressive and destructive actions in children attain their character largely through the child's lack of time perspective and his faulty insight into the structure of things In his aggressive acts he learns to handle objects, a fact which goes to show that activity, aggression, and construction cannot be separated from each other Aggression thus may be only a phase of a more general constructive tendency

Schilder assumes that in the organism there is a basic tendency "not to remain static in completeness but to go from completeness to incompleteness this incompleteness means readiness for new union" There is no connection between masculinity, dominance, and activity, on the one, and femininity, submission, and passivity, on the other side The fundamentally social character of all human experience finds its clearest expression in sex and in the knowledge of it Thus heterosexuality is not only due to a natural determination through maturation and instinct but to a continuous process of construction and adaptation For the child those experiences which he can understand and which are at the time focal for him will serve as models for his understanding of sexuality The biological meaning of courtship may be to gain better knowledge of the love object, which does not attain this function through projection as some analysts assume, but through a number of constructive acts The appreciation of the love object's independent existence and the feeling of incompleteness on the part of the mate who craves it, are, in Schilder's opinion, the outstanding features of sexuality

This abstract should not be regarded as anything but a scant account of the more general ideas upon which Schilder's book is based It is beyond the scope of this review adequately to relate the wealth of ideas and the topics dealt with—such as the excellent discussion of homosexuality, of attitudes toward death, of depersonalization, and others Nor is there an opportunity to take issue with all the points which seem to call for criticism Beyond agreement or disagreement, the stimulation emanating from Schilder's ideas can hardly be questioned In reading this book one may at times be made uncomfortable by the whimsicalness of an erratic style, and baffled by the meandering stream of thought But this impression will soon wane before the fascination exercised by a very broad clinical experience, an amazing knowledge in various fields, and the sheer brilliance of the author

This book deals mainly with the instinctual aspects of man and leaves the full discussion of the conscious self to the subsequent volume However, its basic orientation is toward a psychology of the ego as the integrator of organism and environment—in the reviewer's opinion the paramount task of present-day psychology In this endeavor the book offers an uneven, often diffuse, yet highly significant, synthesis of clinical observation, experimentation, and of theoretical viewpoints Psychologists on both sides of the anachronistic fence that still divides clinical and laboratory psychology should give it their attention

<div align="right">FREDERICK WYATT</div>

Harvard University

VOCATIONAL ASPIRATION LEVELS OF ADULTS By Harold A Wren New York Bureau of Publications, Teachers College, Columbia University, 1942 Pp 150 $1 85

This is an interesting investigation of the vocational aspirations of adults which takes its hypotheses from laboratory experiments on levels of aspiration and its subjects from clients of an endowed community counseling service which served some 13,000 New York clients between 1933 and 1934 The 871 subjects dealt with are a random sample of the 6500 male clients who voluntarily submitted to the impersonal impertinencies of sundry psychological tests and record sheets Wisely, the parent population for whom the resulting generalizations obtain is defined as those individuals who seek vocational counsel—not the entire male population, from whom they differed with respect to age, marital status, ethnic origin, education, etc

Terse and neat, chapters one to three are devoted to the background, scope, and

hypotheses underlying the study, while the fourth chapter provides the skeleton for the reported statistics which comprise the body of the book Various classifications and scales of occupations are reviewed, and incorporated in appendices are the United States Census Classification (1930) of the 871 subjects, the Barr Scale of Occupational Intelligence, and Beckman's Representative Types of Occupations in Each Grade of the Occupational Scale, this last scale being adopted for the present study The presumptive basis of these latter hierarchies and their ilk is unfortunate, for while it is generally agreed that occupational hierarchies are a reality in our culture, studies of their order remain needlessly segmental However this is not the fault of Wren and, although Beckman's five-graded hierarchy is presumptive in its inferences *re* the socio-economic level of and the intelligence, skill, etc, required by various occupations, still its grades are everyman's (1) unskilled manual occupations, (2) semi-skilled, (3) skilled manual, (4) skilled white collar, (5) sub-professional, business, and minor supervisory occupations, and (6) professional occupations   .

The subjects were then occupationally classified on the scale and once classified are referred to as the "occupational status group" Occupational ambitions or aspirations were also solicited in the record sheets Ordered to the same scale, these afforded a distribution of occupational aspirations and constitute the "aspiration group" The study then consists of a statistical analysis of various characteristics of the "status" and the "aspiration" groups and the interrelations between the two These characteristics are categorized under the following headings personal, family occupational pattern, abilities as shown by objective tests, education, and income For the members of each occupational level comparative data are reported on the characteristics subsumed under the above headings

Quite the most interesting material lies in chapter seven which compares the so-called "status" and "aspiration" groups To attempt here a summary of the findings would be ill-considered since the author's resumé is apposite One or two will indicate their trend "Individuals are generally desirous of deserting lower for higher occupational ranks"   "The subjects on each higher occupational status-level presented increased dominance scores, and there was a similar ascending scale of dominance among the aspirants to the increasingly higher occupational levels" From these and similar conclusions the reviewer is interested in the documentation of a dilemma (1) upward striving is an essential property of all egoes, or (2) in an individualistic, competitive culture where being a successful person is integral with "getting ahead" no man can rest lest his peers best him in the quest for deference (Koffka or Cooley pay your obeisance and take your choice)

Wren is not especially concerned with such problems, his bias is for man in real life situations and he writes an interesting monograph on a vital subject In his final page of notes to educators and personnel workers perhaps Wren should have been more than hintful about the personal tragedy implicit in the differential rates of decline of the ideal of "everyman a professional man" and the actual flattening of the occupational hierarchy, with fewer honorific stations for all

<div align="right">JOHN ARSENIAN</div>

Harvard University   .

SOCIAL WORK—AN ANALYSIS OF A SOCIAL INSTITUTION   By Helen Leland Witmer
     New York Farrar & Rinehart, 1942 Pp 539+xv $3 00

What Dr Witmer did in her *Psychiatric Clinics for Children* (1940) for the field of clinical work with children, she has now done for the field of social work in her later book on social work as a social institution It may seem curious that a

person not actively identified with either clinical or social work as a practitioner should be the one to write such excellent accounts of their origins, development, and practices and to clarify some of the differences and likenesses in current theory and practice Probably it is just the fact of there being such differences of opinion among both clinical and social workers that might prevent someone too closely connected with a particular clinic or social agency from giving as unprejudiced an over-all presentation as Dr Witmer has achieved for both fields in her two books In addition to possessing remarkably keen powers of analysis and interpretation of data, Dr Witmer, as a member of the Smith College School of Social Work faculty, has had long contact with clinics and social agencies Thus she has been well equipped and favorably situated for writing as she has, since her vision has not been narrowed by too intimate a relationship to any special segment of the field of either clinical or social work

The first six chapters of the present book are included in Part I, "The Nature and Function of Social Work," and will probably be of greatest interest to social workers Here Dr Witmer develops the thesis that social work fulfills the requirements of a social institution as defined by Malinowski Evidence is convincingly marshaled to show that, like other social institutions, social work is a system of concerted activities, carried on by an organized and specially designated group of personnel, and operating under a charter (i e , in accordance with doctrines and values recognized by the members of the institution and by the community) and by means of a material apparatus

Part II, "The Evolution and Present Organization of Social Work," and Part III, "How the Social Work Function Is Discharged," should be of value not only to social workers but also to applied psychologists as members of a related profession Chapter VII (Part II), "The Origin of Social Work in the Dilemma of Poor Relief," enables us to appreciate some of the differences between our own profession of applied psychology, which has developed from a background of academic and professional training, and the profession of social work with its early development in charitable and religious work with needy human beings In spite of these diverse origins, the professions of applied psychology and social case work now have—or should have—much in common In Chapter VIII (Part II), "The Development of Social Case Work," Dr Witmer discusses the influence of psychology and psychiatry upon case work, but psychiatry and social case work have also influenced the development of clinical and consulting psychology at least to some extent Along with social workers—perhaps sometimes from them—clinical psychologists have begun to learn that advising or reassuring people who ask for professional help is often not helpful, and to learn that maladjusted individuals cannot always be as completely and perfectly rehabilitated as the professional worker might wish, so that we can only offer our professional skills to help the person who seeks our services to mobilize his own resources and capacities for the solution of his problems (Something akin to this has for some time been recognized by psychoanalytic therapy—that the potentialities of the neurotically ill patient are as important as the skill of the analyst in determining whether recovery will be complete or only partial.)

Part III of Dr Witmer's book has chapters describing social case work in many places where applied psychology also is represented—in child welfare work in schools, courts, and correctional institutions, for example, in psychiatric hospitals and clinics, in child guidance clinics In reading these chapters, psychologists should gain a clearer understanding of the aims and methods of the social workers, an understanding which should lead to better team work between the two profes-

sions The chapter on social work in child guidance clinics will be of special interest to psychologists who are working or who hope to work in such clinics This chapter, together with the chapters on child guidance in Dr Witmer's earlier book on psychiatric clinics for children, gives an excellent picture of the functions of psychiatrists, psychologists, and social workers in child guidance clinics, as well as a clarifying discussion of the variations in theoretical concepts that influence the methods and practices in such clinics The teacher who wishes to acquaint students in psychology with the work of child guidance clinics might profitably utilize the material in Dr Witmer's two books in conjunction with Dr Rogers' book, *The Clinical Treatment of the Problem Child*

Earlier in this review it was suggested that Part I of Dr Witmer's *Social Work* might be of interest chiefly to social workers But the fourth chapter (Part I) should be equally interesting to psychologists, for it contains a discussion of the basic biological needs of the human race and of social institutions as arising in response to those needs for the purpose of satisfying them This chapter also describes social work as belonging to the occupational groups into which people are organized on the basis of work to be done or services to be rendered in order to satisfy human needs Presumably applied psychology also belongs to those same occupational groups and thus appears again as a profession related to social work, as well as in the ways previously mentioned

PHYLLIS BLANCHARD

Philadelphia Child Guidance Clinic

MARRIAGE AND THE FAMILY By Howard Becker and Reuben Hill (Eds) Boston Heath, 1942 Pp xix+663

There are so many marriage and the family books on the market that it is practically impossible to review one book without comparing it to others For instance, when Becker and Hill's book first was published one naturally compared it to books like Jung's *Modern Marriage,* Himes' *Your Marriage,* Groves' *Marriage,* Bowman's *Marriage for Moderns,* and Jordan's *You and Marriage* Jung and Jordan, like Becker and Hill, are editors of their books, while Himes, Bowman, and Groves are individual authors.

Outside of possible financial reward and a certain amount of recognition the only possible excuse for there being such a plethora of books in any one field is the expressed different purpose of the authors Jordan's book is compactly edited into less than 300 pages, is very humanly and interestingly written, and, as the editor states, the material is "adapted for young couples in the first years of marriage," with the emphasis placed on "attitudes and appreciations" Jung's book, which stresses the "ethical and aesthetic implications of the marriage relationship," reads very much in most instances like a cut and dried lecture In almost 700 pages Groves covers practically every known topic pertaining to marriage but does not "lecture" unnecessarily long on any one subject In addition there are 88 supplementary case histories Himes' book of more than 400 pages has as its purpose the offering of a "frank, honest, scientifically accurate discussion of some of• the real problems facing young people today" If there is any book in the field of marriage which can lay claim to being practical, this book is it Bowman's *Marriage for Moderns,* a Stephens' product which introduces a unique combination of a woman's outlook toward marriage from a man's point of view, has as one of its stated aims the bringing of the reader into contact "with facts, principles, attitudes, and problems that are likely to play a part in marriage"

As one can readily see, each book has an avowedly different purpose Becker and Hill, of course, are no exceptions They emphasize the fact that "this textbook is a tool book," and it attempts to combine the better features of the traditional type of course on the family taught in the sociology department and the newer, more practical course on the preparation for marriage

If one were to rate the above-mentioned books on the basis of their value in a practical course on preparation for marriage, the reviewer would list them (1) *Your Marriage*, (2) *Marriage*, (3) *Marriage for Moderns*, (4) *You and Marriage*, (5) *Modern Marriage*, and (6) *Marriage and the Family* On the other hand, for the newer type of sociology and home economics courses being taught they would be rated as follows (1) *Marriage and the Family*, (2) *Marriage*, (3) *Marriage for Moderns*, (4) *Modern Marriage*, (5) *You and Marriage*, (6) *Your Marriage* It is evident that this reviewer is of the opinion that the more practical type of book is written by one author, and the Becker and Hill's book is probably the best of all the books for the marriage courses which look upon marriage as an institution rather than as an interpersonal relationship

Prior to the writing of this book, both Becker and Hill, who had experience in handling marriage and family courses at the University of Wisconsin, had repeatedly used detailed outlines in the courses In preparation for this book, each one of the 27 authors was given a copy of an outline and "assigned a definite portion of it as subject matter for his or her chapter" Some of the outstanding authors listed among the 27 are James H Bossard, Niles Carpenter, Henry Pratt Fairchild, Joseph K Folsom, Willystine Goodsell, Harriet R Mowrer, and Howard M Parshley In view of the fact that the editors felt "that members of the female sex occasionally have some connection with marriage and the family," five of the contributors are women

The book is divided into seven parts (1) Context of family life, (2) Preparation for marriage, (3) Physical factors, (4) Marriage interaction and family administration, (5) Problems of parenthood, (6) Family disorganization, (7) Prospects for the future

One of the unusual characteristics of this book is that although there are many authors, there is little, if any, overlapping of material Apparently this is the outcome of the labors of the editors, of their well-planned outlines, and of the excellent editing job they performed As far as the individual authors are concerned no one can be critical of their material However, one must be critical of the literary style that is generally used Too many of the authors seemed to be under the impression that they were writing for a popular magazine, and as a result the book has an "air of condescension" about it Not too much is left to the intelligence of the reader Perhaps the editors are at fault for permitting their authors too much free rein in their style of writing, perhaps the editors directed the authors to write that way Nevertheless, it is the reviewer's opinion that by using fewer words and getting down to brass tacks the authors might have reduced this book of almost 700 pages to one of approximately 400 pages without in the least reducing its value In general, the major adverse criticism of the book is its verbiage, and its great advantage is in presenting such a fine accumulation of authoritative material all in one book

HOWARD E WILKENING

Purdue University

PERSONALITY AND SEXUALITY OF THE PHYSICALLY HANDICAPPED WOMAN By Carney
    Landis and M Marjorie Bolles New York Hober, 1942 Pp viii+171

The more immediate purpose of this study of one hundred handicapped young
women (25 cases in each of the following categories of handicap spastic, orthopedic,
cardiac, epileptic) was to determine the extent to which environmental or social
conditions affecting the development of the individual influence adult sexuality
The more general purpose was to seek information on influences affecting the
formation and structure of adult personality in general The results of the present
inquiry are compared with those reported in an earlier study by the authors on
groups of normal and abnormal women *(Sex in Development)*

Information about the subjects was obtained primarily from a detailed controlled
interview and secondarily from the medical history and Rorschach ink-blot exami-
nation Seventeen evaluation scales having to do with home background, degrees
of physical handicap, various modes of erotic practice and adjustments, and family
and marital attitudes were employed From the data collected by the interviewer,
three judges assigned various items of information to points in the evaluation scales

The chief results of the inquiry reveal that the physically handicapped woman is
on the whole overprotected by and dependent upon parents, and shows hypo-
sexuality both overtly and in phantasy None of the four different types of physical
handicaps present a peculiar personality pattern The physically handicapped in
general do not exhibit neurotic signs nor do they report any of the marked mal-
adjustments in childhood recorded by a group of neurotic women

The authors reject the psychoanalytic interpretation of personality formation
They claim that the handicapped do not show psychosexuality as the basic aspect
of their personality structure, nor do they make use to any extent of repressive and
compensatory mechanisms to which individuals with "organ inferiority" are sup-
posed to resort according to psychoanalytic theory The authors should remember
that their conclusions are based on the statistical results of their inquiry As far
as these results are concerned, they could not justifiably draw other conclusions
That they do not do so is to their credit But they should not assume that the
objective results of their particular inquiry are sufficiently comprehensive to give a
total picture of the various aspects of the personality of the handicapped or, for
that matter, of any one else

It is true that this study gives us more information in one direction than has been
previously available on the handicapped, it shows us what the handicapped reveal
about themselves in a fairly prolonged and voluntary interview In addition, we
should like to see information obtained from a freer interview where the direction
of the topics discussed was determined by the examinee rather than the examiner
We should also like to have the attitudes toward the handicapped of her family,
teachers, employers, and friends, and observations by trained investigators of the
handicapped in life situations Projective techniques of one kind or another might
also indicate more of the phantasy life of the handicapped than was obtained by
the Rorschach tests administered in the present inquiry

THEODORA M ABEL

Letchworth Village   •

PRINCIPLES OF APPLIED PSYCHOLOGY By A T Poffenberger New York. Appleton-
    Century, 1942 Pp xvi+655

The present book is a revision of an earlier text on applied psychology published
by Poffenberger in 1927 New chapters on radio and the jury have been added,
and there has been some redistribution of emphasis However, the principal differ-

ence between the 1927 and 1942 editions lies in the vast fund of knowledge accumulated in the interim

Individual differences and individual adjustment are stressed throughout the book This orientation is summed up in Poffenberger's definition of the problem of applied psychology "The problem of applied psychology is so to adjust differentially endowed individuals by training them, by selection of their environment, and by control of this environment that they may attain the maximum of social productivity and the maximum of personal satisfaction"

The first five chapters are introductory in character, dealing respectively with the scope of applied psychology, heredity, age, learning, and thinking and suggestion These chapters constitute an excellent review of relevant topics in elementary psychology, although the implications of this material for applied psychology are not always made sufficiently clear It would have been better, perhaps, if some of this material were apportioned among the other chapters of the book

Chapter 6, on work and rest, emphasizes individual differences in output, proneness to accident, metabolism, the feelings, motor control, muscular strength, and sleep Chapters 7, 8, and 9 examine the effects of distraction, illumination, and atmospheric conditions upon achievement These chapters are very well done

Monotony is considered in Chapter 10, and suggestions are made for its management in industry Chapter 11 deals with the influence of drugs and stimulants, with attention centered on tobacco, alcohol, caffeine, and benzedrine

Chapters 12–24 are concerned with vocational adjustment, with special emphasis given to such factors as intelligence, special capacities and abilities, character, interests and attitudes, and various techniques used in the measurement of job adjustment Attention is also given to the role of incentives in work, reducing the cost of work, and employee satisfaction Although more than a third of the book is devoted to vocational psychology, some readers will complain that certain topics are given inadequate treatment The use of the interview in personnel placement, for instance, receives only two pages, whereas many less important topics are given considerably more space

The next section of the book contains three chapters on the psychology of advertising and selling, including a chapter on the role of radio in merchandising The chapter on radio is very brief, and might well have been expanded in view of the vast literature on this subject Newspapers, magazines, the mail, and other advertising media deserve more discussion than they receive Although the chapters on advertising and selling are excellently done, this field of applied psychology does not receive an emphasis commensurate with its importance

Legal psychology is considered under four chapters dealing with the causes of criminal behavior, the determination of guilt, the psychology of the judge and jury, and treatment of the offender Here again the chief criticism is the brevity of certain sections, for instance, only two pages are given to the involved subject of juvenile delinquency

Poffenberger has an interesting chapter on the prevention of disease in which he suggests that it is largely a problem in mass education, and amenable to psychological techniques A brief description of diagnostic methods employed in clinical psychology is given, including material on psychoanalysis, the Rorschach Test, the Murray Thematic Apperception Test, and various personality inventories The author has a number of very interesting, practical suggestions for the prevention of maladjustment

It is suggested that a satisfactory synthesis of psychology and medicine has not been achieved, and reference is made to Harrington's proposed "School of Mental

Health" as a possible solution   Such a school would train practitioners for work in the field of mental disease, providing training in both psychology and medicine

Only twelve pages in the entire book are specifically devoted to education   The psychological feasibility of adult education is pointed out, attention is given to the education of the personality, the educational value of radio and motion pictures is commented upon, and the implications of applied psychology for education are broadly referred to

The only salient weakness in the book, if, indeed, it is a weakness, lies in the distribution of emphasis   The book is a far better preparation for the student going into industry or business than for the student going into medicine or education   The book will prove difficult for students who have not had a considerable background in psychology

Poffenberger is to be commended for writing a comprehensive and interesting summary of the applied psychology field   The book is thoroughly documented with 732 references and it includes 114 figures   Although there might be some redistribution of emphasis, it is, as a whole, representative of the field it is attempting to describe   It contains many stimulating and original ideas, and is both sound and authoritative

<div style="text-align: right">Oscar Kaplan</div>

University of Idaho, Southern Branch

Autonomic Regulations   Their Significance for Physiology, Psychology and Neuropsychiatry   By Ernst Gellhorn   New York   Interscience Publishers, 1942   Pp xii + 373

Most textbooks of psychology, particularly elementary, physiological, and abnormal psychologies, give some attention to the structure and function of the autonomic nervous system as it is related to human behavior   Usually this presentation is highly simplified and leaves the student with the impression that pleasantness, unpleasantness, and the various emotions are somehow controlled by the autonomic nervous system in some mysterious fashion

Not many psychologists or psychiatrists are going to read this monograph of Gellhorn's   It is difficult reading   It presupposes a good foundation in anatomy, neurology, biochemistry, and physiology   It lacks style and human interest   Nowadays most psychologists and psychiatrists are socially minded and are not interested in physiology or biology

Such neglect will be a distinct loss to both psychology and psychiatry, for Gellhorn has synthesized the pertinent biological research of the last twenty years in an exemplary fashion   (There are more than 1100 bibliographical citations, most of them referring to articles since 1925)   After giving the anatomical and physiological foundations, he deals with "adjustment reactions involving primarily the respiratory and circulatory systems," "autonomic-endocrine integration" and "autonomic-somatic integration"   On the basis of this he then deals with the applications that are of interest to psychologists, among which are adjustment to starvation, the problem of sleep, the autonomic basis of emotion, the relation of the autonomic and cerebrospinal nervous systems, anaesthetics and anaesthesia, and finally the role of the autonomic nervous system in certain problems of neuropsychiatry

Chapter 14, "The Autonomic Basis of Emotion," is of special importance to psychologists   Gellhorn concludes

On the basis of observations on acutely and chronically decorticate animals, and of experiments involving direct stimulation of the hypothalamus   this structure represents the center of autonomic and somatic integration of the motor expression of emotion   As far as the role of the autonomic nervous system is concerned, the sympathetico-adrenal discharges predominate, but   under suitable conditions of stimulation, parasympathetic effects may be obtained from all parts of the hypothalamus   This makes it probable that emotion is characterized by sympathetic and parasympathetic excitatory, and parasympathetic inhibitory, discharges   Evaluation of the clinical and experimental literature shows that parasympathetic and sympathetic excitatory effects occur in emotion, and that the former are by no means restricted to pleasurable emotions   Sham rage, rage, and fright which are accompanied by a general sympathetico-adrenal discharge may also involve the excitation of the vago-insulin system   When the effect of emotion and of electrical hypothalamic excitation on the sympathico-adrenal system was eliminated, either by sectioning of the spinal cord or by denervation of the adrenals and of the liver, a fall in blood sugar occurred which was mediated by the vagus   It is concluded that emotional processes and sham rage lead simultaneously to a discharge of both the vago-insulin and the sympathetico-adrenal systems, with the latter predominating in the normal animal

The hypothalamus produces certain autonomic-somatic patterns which accompany emotion, but does not produce emotion itself   The cortical areas probably involved in the emotional process are discussed   It is concluded that the somatic phenomena accompanying emotion are in part of hypothalamic, and in part of cortical, origin

The final chapter deals at some length with the physiological changes brought about by the various shock therapies   insulin, metrazol, electric shock, etc., used today on mental patients   He concludes

Although the various methods of treatment differ profoundly in their effects on the metabolism, brain circulation, and cortical potentials, they have one effect in common, namely that they stimulate the vago-insulin and sympathetico-adrenal systems   This holds true for convulsions induced by metrazol, picrotoxin, and electrical currents, fever following the injection of typhoid-paratyphoid vaccine, and anoxia   These effects are demonstrated not only by studies of the blood sugar of normal, adrenalectomized, and adrenalectomized-vagotomized rats, but also by investigations of the reactivity of the autonomic centers to direct and to reflex stimulation   Since in normal individuals (man and animal) the sympathetico-adrenal stimulation predominates over that of the vago-insulin system, it seems likely that the therapeutic effect in schizophrenia is linked up with the stimulation of the sympathetico-adrenal system   It is concluded that a relative weakness of the sympathetic centers is largely responsible for the altered behavior in schizophrenia, and that prolonged excitation of the sympathetic centers may restore the disturbed autonomic balance and exert far-reaching effects on the cortex itself

In summary, this monograph brings together the scattered and basically important biological research of the past twenty years and will serve as a convenient source book for psychologists and psychiatrists who are interested in the physiological basis of human behavior

CARNEY LANDIS

Psychiatric Institute, Columbia University.

BEHAVIOR AND NEUROSIS   AN EXPERIMENTAL PSYCHOANALYTIC APPROACH TO PSYCHO-
    BIOLOGIC PRINCIPLES   By Jules H Masserman   Chicago   University of Chicago
    Press, 1943   Pp xv+269 $3 00

The occasion for the book is provided by two series of experiments by the author and his collaborators

The first set of experiments, with the cat as the laboratory animal, is concerned with the role of the hypothalamus in emotion   The major conclusion is that the hypothalamus may integrate some of the impulses controlling sympathetic and motor manifestations of fear and rage, but "there is little or no basis for the thesis that the hypothalamus governs or even mediates the emotional experiences themselves "

The second group of experiments, done with 82 cats and two dogs, is concerned with experimental neuroses and therapy The animal was trained to lift the lid of a food-box at a sound or light signal The experimental neuroses was induced by an air-blast across the box at the moment of food-taking Symptoms included chronic anxiety in or out of the experimental situation, phobic responses to stimuli symbolic of the conflict situation, and other "neurotic" phenomena, including fixated behavior, compulsive and ritualistic acts

Six methods of psychotherapy were studied (1) a period of rest, (2) diminution of the hunger drive as a way of reducing the conflict, (3) "reassurance" and "suggestion," largely through fondling by the experimenter, analogous to transference technic, (4) forced solution through environmental manipulation, (5) "social example" of another cat reacting normally to the situation, (6) "working through," by means of a substituted goal-directed activity The last method consisted in the use of an electric switch by means of which the animal itself controlled the conditioned stimuli The animal was more active than in the situation in which the signals were presented by the experimenter, and was more resistant to the development of neurosis Rest was ineffective as a cure, but each of the other five methods produced some therapeutic effect The methods worked best in combination

These important and well-conceived experiments furnish the basis for three of the eleven chapters of the book The remaining chapters provide a context for the experiments, review the literature, and suggest therapeutic applications

As an experimental psychoanalytic approach, by an author with psychoanalytic training, one is led to expect rather more coordination of the experimental results with psychoanalytic concepts Instead, the bulk of the book is devoted to an extensive, but somewhat diffuse, review of experimental work with animals on conditioned reflexes, motivation, and conflict The purpose is to show the homologies between animal and human behavioral aberrations While the survey of animal behavior is done quite successfully, the problem of the precision of the parallel is treated in cursory fashion There is no detailed consideration given to the similarities and differences within the experimental situation and within the analytic situation of behavior appropriately considered under topics such as transference, identification, and repression Where these and related topics are discussed, the treatment is temperate, but it is much too casual, considering the scholarly pretensions of the book in other directions The bibliography contains some 900 titles

The experimental lead which appears to hold a good deal of promise for parallels with psychoanalytic therapy is that known as "working through" the anxieties and conflicts by means of symbol-representations of reality The substituted activities of the cats seemed to work therapeutically much as the substituted activity of patients

<div align="right">ERNEST R HILGARD</div>

Office of War Information,
on leave, Stanford University

GROUP THERAPY By S R Slavson New York Commonwealth Fund, 1943
     Pp 350 $2 00

For some years social workers and psychiatrists have been discussing the possibility of treating "problem children" by means of "group" methods, and the techniques used by various workers have been described in the literature Dr Slavson, the author of *Group Therapy,* has been one of the outstanding exponents

of this approach This newest book of his describes in more detail than most of
the writings in the field the theories upon which his work proceeds and the
methods used in it

The type of therapy here described is designated "activity group therapy," a
phrase indicating that the work is carried on through activities, social and indi-
vidual, of the children themselves rather than through discussions initiated by the
leader or through "interpretations" by the leader of the meaning of the patients'
behavior The patients are children, nine to eighteen years old, who have diffi-
culties in group relationships, either because they are too hostile and aggressive to
be acceptable to other children or because they are too fearful of other children to
be able to join in group activities It is Dr Slavson's belief that these difficulties
stem from inadequate ego and superego development, that the children suffer from
an inability to see the world as it actually exists, finding in it instead a replica of
their hostile phantasies Consequently, the children cannot be influenced by adults
in the normal manner, cannot "identify" with them and so take on acceptable
social modes of behavior

In order to help such children, clubs are formed, each consisting of children of
the same sex, of about the same age, and with fairly similar types of problems
The club leader exercises a therapeutic influence by creating a "permissive atmos-
phere" (one in which the children are allowed to do very much as they please, the
only restriction being that they do not attack the leader) and by giving "uncon-
ditioned love" (complete acceptance, that is, regardless of the child's behavior)
The group exerts its influence by curbing too great hostility and by setting an
example of approved behavior In this situation it is believed (and demonstrated by
case examples) that many hostile or withdrawn children act out their infantile
phantasies and come to accept the world as it actually exists and join in its activities

In addition to the description of general principles and methods, the book con-
tains examples of record keeping, rules for the selection of children for this type of
therapy (it is specifically stated that it is not suitable for all children), and an
analysis of the therapeutic process and the role of the leader in it

Any estimate of the validity of the principles and methods of activity group
therapy must be made on the basis of experience rather than logic Logically, the
method appears to be sound, granted the correctness of the Freudian theory of
personality development Even the practice that the layman will be most dubious
about—the granting of almost complete freedom to carry out aggressive impulses—
seems sound when applied within the limitations of type of patient and duration
of such permitted conduct, which are described in detail as the analysis proceeds
What does seem needed, however, is a more exact set of diagnostic procedures for
judging ahead of time which children can be expected to benefit from this treatment

                                                    HELEN LELAND WITMER
Smith College School for Social Work

REHABILITATION OF THE WAR INJURED A Symposium   Edited by William Brown
    Doherty and Dagobert D Runes   New York Philosophical Library, 1943

This book is a compilation of reprints of papers published in various journals
It contains a number of interesting articles concerning head injuries and the psycho-
logical factors significant for the rehabilitation of injuries of other kinds Unfor-
tunately, most of the papers of the first kind concern particularly the physiological
phenomena as, for instance, the excellent papers, "The Sequelae of Head Injuries"
by D. Denny-Brown, "Rehabilitation of Head Injuries" by W McKissock,
"Rehabilitation after Head Injuries" by H Cairns, "Rehabilitation after Injuries

to the Central Nervous System" by G Jefferson, H Cairns, W R Brain, and L Guttmann, and "Psychological Reactions to Injury" by L Minski   The psychological evaluation and the significance of the psychological defects and their treatment for rehabilitation is mentioned only in a few papers   On the other hand, such an instructive paper as Stanley Cobb's "Speech Disorders and Their Treatment" has no reference to the special condition in brain injuries, apparently, it was written for a totally different purpose

It is understandable that some articles are of a rather preliminary character because of lack of sufficient experience up to this time   Most of the papers are based on the experience of the English, the literature of the last war is scarcely used

In spite of these reservations I should like to say that, in some of the articles, psychologists may find many hints which will become useful to those who undertake the work of rehabilitation

The articles on surgery are, in most cases, excellent

KURT GOLDSTEIN

Tufts College Medical School

NEW BOOKS RECEIVED

BRECKENRIDGE, MARIAN E, & VINCENT, E LEE *Child development, physical and psychological growth through the school years* Philadelphia Saunders, 1943 Pp ix+592 Price $3 25

BROOKS, R A E (Ed) *The diary of Michael Floy, Jr* New Haven Yale University Press, 1941 Pp xi+269 Price $5 00

CLAYTON, ALFRED S *Emergent mind and education* New York Bureau of Publications, Teachers College, Columbia University, 1943 Pp xiii+179 Price $2 35

DELGADO, HONORIO *La personalidad y el caracter* Lima, Peru Talleres Graficos de la Editorial Lumen S A , 1943 Pp 204

FARBER, MARVIN *The foundation of phenomenology* Cambridge Harvard University Press, 1943 Pp xi+585 Price $6 00

HAHN, EUGENE F *Stuttering, significant theories and therapies* Stanford University Stanford University Press, 1943 Pp x+177 Price $2 00

HULL, CLARK L *Principles of behavior* New York Appleton-Century, 1943 Pp x+422 Price $4 00

JENNINGS, HELEN H *Leadership and isolation* New York Longmans, Green, 1943 Pp xv+240 Price $3 00

JONES, HAROLD E *Development in adolescence* New York Appleton-Century, 1943 Pp xvii+166 Price $2 00

LEVY, DAVID M *Maternal overprotection* New York Columbia University Press, 1943 Pp ix+417 Price $4 50

MORGAN, CLIFFORD T *Physiological psychology* New York McGraw-Hill, 1943 Pp xii+623 Price $4 00

OBERNDORF, CLARENCE P *The psychiatric novels of Oliver Wendell Holmes* New York Columbia University Press, 1943 Pp viii+268 Price $3 00

The Journal of Abnormal

and

Social Psychology

THIS CLINICAL NUMBER

O NE year ago this JOURNAL tried a novel experiment in editing and publishing a *Clinical Supplement*—distributed, cost free, with Volume 38, No 2 The *Supplement* was devoted entirely to case studies in abnormal and social psychology

The readers of the JOURNAL (who, if they are members of the American Psychological Association, are also its owners) were asked for their opinions concerning the value of the experiment, and their vote for or against its continuation if ways and means could be found A commercial postcard slipped into the covers of the issue invited a ballot The surprising total of one hundred and seventy-six cards were returned, the vote being as follows

      Approving the continuation of the Supplement   172
      Disapproving the continuation of the Supplement   4

Even granted that a preponderance of favorable replies might be expected by this method of polling (there being no compulsion on those who were indifferent or bored to cast a ballot), still, the mandate is clearly positive

Besides the postal return there came many letters discussing the publication in detail, and offering suggestions for the future development of the *Supplement.* Many of the comments proved that the number had been read from cover to cover. This fact is itself a tribute to the enterprise It is interesting also to note the large number of replies coming from members of the armed services, indicating that psychologists in the Army and Navy are attempting to "keep up" with their professional reading

With one exception the four dissident voters did not offer comments, the one exception stating the view that single cases are not "scientific"

The majority of the 172 affirmative voters wrote comments The following samples show their tenor and indicate the type of suggestion made.

Congratulations on fulfilling a strongly-felt need!

I can think of a dozen ways in which I can use the material in my present classes

Though I support the idea of verbatim accounts, I feel that the articles would be improved if the authors interpreted the material as well and sought to relate it to basic theoretical questions

I like the *Clinic Supplement* better than the regular journal   Think it is an excellent idea

For practicing clinical psychologists, like myself, the idea is wonderful   Suggest continuation   A poll among subscribers will certainly show this

I found it an interesting batch of print   The high point seemed to me the sketch of Harold Holzer, in fact, I found it sufficiently intriguing so that I grabbed it again this afternoon and finished it

Like the idea of a Clinical Supplement   After this first sample I would hope for more articles definitely related to the problems of the clinical group in AAAP

As an institutional psychologist, I feel a real need for such a concretization of principles

I was very much pleased to see a *Clinical Supplement* to the JOURNAL   From ten years of private practice I have material I never considered publishing in the psychological journals as of yore

I do hope that this may be made permanent, since a case-study journal is much needed and there is none at the present time

As an Army Personnel Consultant I find it valuable   Would like to see more on Army problems and maladjustments

At last!   For research purposes it would be valuable if complete original protocols (*e g ,* of Rorschachs) might be included in case studies when such techniques were used

The need for a journal which "caters directly to psychologists with a clinical interest" is imperative   Suggest a quarterly or bimonthly

A cracker-jack idea!   If you decide publicly to repeat, you'll find a lot of good material coming in   Many who have good material have never prepared it for publication because of lack of outlet

I liked especially the Elkin, Snyder, Veltfort and Lee, and Thurmond articles— probably not readily publishable elsewhere

Suggest double column format E 8-pt type for clinical material, cutting costs 20–30 per cent

In view of the strong affirmative mandate the editor approached the Council of the American Psychological Association for permission to issue another *Clinical Supplement* gratis to subscribers in 1944   The Council readily assented   It did not seem wise to either the Council or the editor to undertake any more elaborate

extension of the experiment (for example, a subsidiary quarterly journal) during wartime.

But while the second *Supplement* was in preparation, the restrictions on the use of paper became acute And so the plan for an "extra" for the year 1944 had to be abandoned

Rather than let the whole enterprise lapse it was decided to convert the present regular April issue into an exclusively *Clinical Number,* hoping after the emergency is passed to resume the *Supplement,* or perhaps to turn to some more ambitious plan for establishing on a permanent basis the type of clinical journal that so many teachers and practitioners clearly desire

The editor offers this explanation and report to all those readers who have so kindly expressed their interest in the undertaking, and who agree with him that the case study is a sadly neglected *genre* of psychological writing The war, it seems, is forcing psychologists everywhere to realize that their abstractions can be derived safely only from real-life situations, and that these abstractions need constantly to be submitted to test against concrete materials drawn from everyday existence

In the present number, therefore, the experiment is continued We may now hope that increasingly effective case studies will be written, and that means can be found to insure their publication in larger quantities The enthusiastic support of our subscribers gives strong impetus toward this goal.

THE NATURE AND TREATMENT OF STUTTERING:
A CLINICAL APPROACH *

BY JULIAN B ROTTER

Headquarters the Armored School, Fort Knox, Kentucky †

FROM a previous experimental study (6), the author inferred a relationship between those environmental factors which are commonly called "pampering" and the occurrence of stuttering If such factors play any etiological role in stuttering, this earlier study did not demonstrate in what manner they operate In order to discover this, the history prior to stuttering and the development of the stuttering reaction were examined extensively in eight adults An hypothesis became sufficiently well formulated that a therapeutic approach which it indicated was undertaken on five of the cases as a partial test of its validity. The history-taking and the therapy were carried out under somewhat controlled conditions as described below.

SUBJECTS AND PROCEDURE

The main criterion used in selecting the cases was the possibility of finding sufficient time when both the investigator and the case could meet conveniently   The general personality adjustment of the cases, as externally observed, and the severity of their stuttering covered a wide range   They were all of average or superior intelligence, in terms of Otis mental test scores   All but one (Case 2) had been subject to some previous form of therapy

In the recording of histories, until a fairly complete and coherent picture was obtained the investigator refrained from any active interpretation or suggestion that might color the information given. However, it should be admitted that the nature of the questions tended to bring out certain kinds of information, although the material obtained must be regarded as factual

Although an attempt was made to avoid bias in selecting sub-

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jects, the conclusions based on the study of cases do not rest on an assumption of random sampling or the number of cases studied However, the author firmly believes that any general laws which hold for individuals who stutter operate in *every* individual case and are discoverable if the case is studied intensely enough. In fact the study of single factors in large numbers of subjects often acts to obscure the general laws which may be present At least in the early stages of the investigation of a field, the thorough study of individual cases may well be more efficient for arriving at hypotheses

The sources of information were as follows. (1) Direct questioning in regard to past events and attitudes, that is, with emphasis placed on actual events and on daily situational variations as well as variations over the entire ontogenetic development. (2) The subjects, parents, and in some cases teachers, were asked to describe their version of the circumstances preceding and during the onset of stuttering (3) Before the subject could possibly discover any theoretical bias on the part of the investigator he was asked to write out in detail all of his earliest memories[1] (4) The subject was asked to list in detail situations, goals, etc (*a*) where he felt stuttering was a handicap, (*b*) where it made little or no difference; and (*c*) where it actually was of some help He was also asked to list the situations which he feared most from the speech viewpoint. (5) After the subject was well along in therapy he was asked to write an autobiography, which in some cases produced additional facts

The eight case histories given below are obviously not complete and are concerned almost wholly with psychological conditions Information concerning organic states and ordinary civil facts was obtained but was not included here unless it seemed to have some important bearing on the development and course of the stuttering At the conclusion of each history the interpretations of the author, based on his own evaluation of the case material, are presented. Once treatment was begun the subjects dropped all other therapeutic approaches A detailed description of the therapeutic procedure will be given later.

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[1] A discussion of the significance and interpretation of such earliest memories is given by Adler (1)

CASE HISTORIES

CASE 1, ROBERT

Age 21, male, medium height, good looking, meticulous dresser, agreeable, and friendly   Family well off for the small Midwestern community where he spent his childhood   Junior in college

An only child, he described his childhood as being "doubly pampered"   A younger sister of his mother's lived with the family and he reports that both mother and aunt would fight for the privilege of dressing him and taking him downtown   He slept with his mother usually and with his aunt when he did not sleep with his mother, at least to the age of six   Usually he preferred to play alone and liked being with adults   His earliest memory was of having his hair cut for the first time while his mother and aunt cried   He went to kindergarten where his aunt was the teacher and from there to the first grade   Before he progressed very far he was taken out of school and taught at home (both his mother and aunt were school teachers) during the first year and subsequently in the second, third, fifth, and one later grade   In high school he received average grades   His choice of college was determined mainly by the presence of the speech clinic at Iowa and he began work on his speech immediately upon entering

Speech History   Before entering the first grade he was forewarned that his teacher was a "holy terror" and he entered this class already fearing the situation He states, "I was in constant fear of her   After about a month she slapped me when I did something wrong   What I did right then is rather vague, but I know that I thought I'd die on the spot"   Shortly after this his mother visited the school and she describes the following episode, "Robert talked very low and faltered several times   Not knowing what the trouble was I took him to the family doctor and he advised taking him out of school immediately as he was in a nervous condition " Of this year at home Robert states that outside of the fact that he stopped stuttering he remembers very little   The second year, when back in school, he began to stutter again but his teacher was very kind to him   On a day when the teacher was absent a substitute teacher, who was not acquainted with his "malady," called upon him to read   The mother reports, "When Robert read she thought it was funny so for her own amusement she had him read on   When he arrived home for lunch he showed the reaction, he looked like he had all the life taken out of him " Consequently he was taken out of school again, and again, when home, he did not stutter   This procedure was continued in three later grades   In high school and grade school his mother would go to school before the beginning of each semester to register for him and to see all his teachers, the principal, and advisors to tell them that Robert needed special attention and care and should not be called on in class

One summer during high school he was taken to New York for treatment of his stuttering, the therapy showing little effect   During vacations his speech always improved   At the Iowa Speech Clinic he was subject to several therapies resulting in a diminution of the severity of the stuttering but no actual cure   On one summer vacation during this period he stopped stuttering while at a job consisting mainly of reading numbers in an accountant's office

At the time of the first interview he was thoroughly convinced of the seriousness of his "handicap"   He reported that on vacations, on dates, and when talking to inferiors, he had less trouble than usual   His appearance was practically faultless, he was an active member of one of the leading social fraternities on the campus and was quite interested in "dates"   He played tennis well but reported that when

he started to lose he would begin obviously to "fool around" so that he could give the impression that he was not trying   In general, he reported that he didn't mind discussing his stuttering with people, in fact, he rather enjoyed it   Listing situations where stuttering helped him he gave a long list of items which is reproduced without change of words or punctuation   The obvious breaking away from the instructions on the fourth item and the unasked for parenthetic rationalizations are of decided interest   (1) It gave me a topic of conversation in certain situations (2) In getting out of much school work (reason for low grades)   (3) Getting sympathy from everyone and being able to feel sorry for myself   (4) Reason for not getting more dates and not being more popular (generally)   (5) Making my family feel that they must do everything in the world for me   (6) Making me enjoy little things more than most people (scenery, weather, music, shows, reading, etc)   Living in general   (7) Making me try and do everything well (not excel) (8) Interest in knowing people and understanding them   (9) Being the center of attention

Interpretation   It is quite clear in this case that the first stuttering appeared when called upon in class at the time when the mother came to observe him   The excessively pampered child, in the classroom, which, in comparison to home, he felt was very hostile and with a teacher who had struck him, was probably overwhelmed with self-pity accentuated by the appearance of the beloved protector, his mother   Being in this high state of emotionality, when called upon, he faltered and could not speak   This brought the wonderful result of being permanently removed from the feared school and returned entirely to the loving and overprotecting atmosphere of the home   When returned to school the following year the faltering reappeared, although it was absent all the time at home   Before this second year had gone very far he was able again to return to his mother's protection by means of his stuttering, and several times subsequently   From a study of the adult personality it is quite evident that the stuttering had taken on at least two new meanings   One was an excuse for lack of achievement, the second as a device for getting attention and sympathy from society as a whole

CASE 2, JOHN

Age 27, male, tall, presentable-looking, athletic   Home in a small Midwestern town   Family of adequate socio-economic status

The oldest child in the family, he was three years old when his younger brother was born   At about this time a young aunt came to live with them, who, with her girl friends, showered much attention on him   They often dressed him up as a girl, and upon entering school he had long, bobbed hair and wore immaculate velvet suits   When asked about his parents' preferences he stated that his father was always away from home, but he thought his mother liked him better than his brother   His brother throughout was the more successful both in school and in social life, and when the case entered the clinic his brother was the editor of the town newspaper   His earliest memories were as follows   (1) Taking castor oil against his will   .   his father got down on the floor and poured it down his throat. (2) He was hard to manage at home   (3) He got a brand new bicycle, which was too big for him, so he traded it with another child who had a smaller one   .   remembers that he got a paddling and was sent to get his own back He entered school when six years old and reports that he was afraid of other children at this time, especially since they teased him as being a "sissy," but the teacher was very kind and thought he was the nicest boy in the class because he was always good and dressed very neatly and cleanly

Until the fifth grade this situation persisted, with John more or less isolated from any playmates, but at this time he began to play with other children   For several years after, however, he considered that he could not play most games as well as the other boys and would give up   He maintained the shy, retiring nature from which he temporarily blossomed forth when his schoolmates began to dance and he already knew how   After a while he began to feel that the other boys were better dancers than he, and he gave up dancing entirely   In high school he "gained back some of his confidence   tried out for basketball, but was no good because he was afraid to get in and play"   He maintained that in practice he was a good shot but in a game he was too tense to shoot well   Later in high school his social relations and athletic achievements improved   Following this he worked for several years at various jobs   He tried one year of college, quit, and worked for several more years   The final stimulus for his coming to the Iowa Speech Clinic was his failure to get a coveted job with a large oil company due, he claims, to his speech

Speech History   His family and John guess that stuttering began around four or five, but he was not aware of any stuttering before he went to school   He was excused from recitations from the beginning   When he did speak, he reports that teachers and parents tried to slow him down so that he wouldn't stutter   He received good grades throughout school   In learning poetry he would get up and recite a poem without stuttering, if he knew it, if he didn't he would get up and block and shift until the teacher would excuse him and credit him with a perfect recitation

In high school he hardly ever had any trouble in arithmetic classes, a subject he liked and in which he was proficient, but in other classes he was always afraid to talk "for fear he would stutter"   In the last two years, when his social relations and athletic achievements were better than ever before, he had very little trouble with his speech   Throughout all this time he had more trouble at home than anywhere else   During the following years the stuttering persisted but varied considerably, it being worst the year at college and otherwise occurred more or less in inverse relationship to the importance of the position he had   Even when his stuttering in business relations was practically gone, it persisted strongly at home and in social situations

John, at the time of entering the clinic, was an extremely extroverted and friendly person   He manifested great desire to do anything to cure his stuttering, which was moderately severe   His attitude was one of feeling sorry for himself, and he thought that everyone else should feel sorry for him, too   He listed situations in which stuttering had helped him as (1) Avoiding preparation of oral recitations and debates in school   (2) Having the teachers' sympathy   (3) Avoiding of running many errands   (4) Making him more kind to other people

Interpretation   This is a picture of an oldest child surrounded by adults (parents, aunt, and aunt's friends), who was unused to competition with other children as evidenced by his fear and dislike of them when entering school   His early home behavior after the birth of his brother suggests a marked reaction to it   In his listing of things where stuttering helped him he includes an apparently insignificant point, namely that he got out of running errands   Perhaps we can restate this to say that "my brother had to run all the errands for me"   The constant severity of the stuttering at home, where he got the most sympathy, also argues for the importance of this early home situation in the developing of the stuttering   Unfortunately the exact circumstances of his beginning stuttering are lost, but it is definitely significant that he was not aware of any stuttering until he first had to

make the difficult adjustment from an overprotected home life to the open com-
petition of the school room The importance of his tendency to give up an activity
as soon as competition became great must also be noted (*i e ,* dancing) Finally,
it appears that the constant fluctuation of the severity of his stuttering follows a
clearly defined psychological pattern but no physiological one that could be
determined

CASE 3, RICHARD

Age 25, male, presentable, friendly Childhood spent in Midwestern city where
his father was a school teacher Graduate student in business administration

An only child, he was of normal weight at birth but was bottle fed from the
first He soon became a feeding problem and lost weight rapidly and had, accord-
ing to his mother's report, at least two convulsions before he was three months old
At fifteen months he had whooping cough, at two years diphtheria of the larynx
He recovered from all these illnesses and was, according to description, a healthy
normal boy at three years Much of these first three years was spent in long visits
to his grandmother as his mother was very sick During one of these visits a sister
was born who lived only a very short time Doctor's bills made deep inroads into
the family finances and the general air of the period of his early childhood was
one of fear and anxiety His earliest memories concern situations where he was
rescued from leaning over the railing of their second-story flat by his anxious
mother He remembers leaning over deliberately and waiting for his mother to
come and find him thus Another memory is of falling off an ironing board
when his mother was gone from the room There are also a long series of very
vivid early memories of times when he was terrified   by an idiot   by a
man dressed as a rooster at a church Hallowe'en party, etc His father was a very
dominant person who, from early childhood to adulthood, made all of Richard's
decisions He was afraid to start going to school and also to change from one class
to another In his autobiography he writes, "During grade school days we moved
three times, necessitating a new adjustment to school situations each time These
changes were always very difficult in my case and make up some of the most trying
situations of my life" The vacation following completion of grammar school was
marked throughout by anxiety concerning his having to go to high school At
this time he stopped playing with companions his own age and played games with
children considerably younger than himself This lasted for the first two years of
high school and was given up under considerable pressure from his parents
Clarinet playing was substituted for this After school, instead of playing with
classmates, he went home and practiced the clarinet Following in turn were
amateur radio and other hobbies that took up all of his waking hours outside of
school About this time he was also burdened with facial acne Upon finishing
high school his main personality characteristics were introversion, fear of new
situations, shyness, and timidity He was physically small

Richard started college as an engineering student His first year was marked by
social, physical, and academic failure He was living at home during this first
year, but the second year, under pressure from his father, he went to a school at
some distance from home for the training of commercial teachers Of his arrival
at this school he writes, "I found a funny thing happened almost at once, when
my parents drove away that afternoon it seemed as though some of the load under
which I struggled went away with them I felt better immediately   I never
had a homesick hour all the rest of the time I was there" He soon became fast
friends with someone rooming in the same house whom he characterizes as slow,

easy-going, and happy-go-lucky This friendship is still very important to him Under encouragement from this friend he learned to play tennis and made the college tennis team, he learned to dance and go out on dates and to parties and was pledged in one of the social fraternities Upon graduation from this school he was placed through the college placement bureau and taught for two years in a small school He then decided to get a better job and went to summer school at Iowa but found that he couldn't get a job and stayed on to complete the work for an MA degree

Speech History He did not start to stutter until between the ages of four and five years At this time he was not considered as a stutterer by his parents He himself was the first one to apply the name stuttering to his speech After a dinner at home, at which there were guests present, his mother asked him why he didn't say please at one particular occasion and he replied that he was afraid that he would stutter His speech difficulty became worse when he entered school and always improved during vacations However, during the vacation preceding his going to high school, which was marked with anxiety over the new, difficult adjustment he anticipated, there was no improvement He received speech correction work in high school with no effect When he was engaged in amateur radio work he conversed fluently with other invisible amateurs The severity of his speech difficulty lessened somewhat in college, but he feared that he couldn't get a job on graduation because of his speech and neglected even to apply for one until his father came to school and applied for him Once starting to teach, however, he reported that he stopped stuttering completely for the two years that he kept his position This was not a gradual but a sudden change Once he gave up this job he began to stutter again and failed to get a position teaching at the conclusion of summer school, due apparently to his speech

At the time of the first interview his hesitations were short and not accompanied by facial contortions or distraction mechanisms Under difficult situations, however, they became more pronounced and were marked by changes in voice quality He never stuttered when speaking to his roommate, who was the same close friend he had in college His manner at this time was very friendly and somewhat "nervous" In his listing of situations where stuttering was of advantage he lists getting out of recitations, avoiding unpleasant situations, as an excuse for failure of any kind

Interpretation From the very beginning this child's environment was one of anxiety His earliest memory is one in which he demanded his mother's attention through appealing to her anxiety for his well being He himself was filled with many fears It is not speculating too far to think that as a result of his own fears he needed and constantly received protection from his parents The emotional upsets to which he was frequently subject may well have resulted in numerous speech interruptions until the fear of speech interruption became added to his many others At this time he had an uncle who stuttered and whom he saw often He learned the name and nature of his uncle's speech difficulty at an early age and also learned that it entitled its bearer to all kinds of special treatment and protection In school life his father went to all of his teachers, as he entered each new grade, acquainting them with his child's handicap Many new adjustments and difficult situations were avoided for he needed his father to precede him like a press agent before he would approach a new situation In vacations, when the demands of school were lessened, his speech improved In college when away from home for the first time and his stuttering could no longer bring him its protection, he made a good adjustment under the stimulation of an extroverted friend. When he was set up in a teaching position, which he obtained more or

less in spite of himself, there was nothing to fear He had a position of superiority which he could not lose as there was a severe shortage of teachers of commercial subjects and consequently no need of a defense mechanism However, once he resigned this position and its security and faced an unknown future, his stuttering began again What possibly arose as a method of getting increased protection seemed to become a way of anticipating new situations and expected failure by starting with an excuse first

CASE 4, KENNETH

Age 18, male, tall, athletic build, sad expression Rural background (large Western farm) of adequate socio-economic status Freshman at college

Kenneth is the youngest of three children, the only boy in the family He is separated from his next older sister, who is described as being "nervous" and very difficult to get along with, by several years The parental discipline was one of overprotection plus threats Early memories were concerned mainly with fears and several "scares" His early playmates before school and during the first few grades were mostly girls Quite often he was teased and reacted severely to this teasing, although he was unable to remember what he was teased about In the first six grades at school he states he was definitely the teacher's favorite In high school he received adequate grades and during this time was rather retiring, shy, sensitive, and concerned over his own inadequacies He was quite shy with girls and only rarely went out on "dates," or attended parties Following high school he went to Iowa, mainly to work on his stuttering

Speech History His parents claim he stuttered from the beginning of speech At four years of age, after he supposedly began stuttering, his handedness was shifted from left to right, the shift making no observable difference in speech He himself has no memory of early stuttering and states he was not self-conscious concerning it before the age of ten The father had "stuttered" before beginning school and it is reasonable to suppose, considering his overprotective and dominating attitude, that his attitude and concern over his son's speech was abnormal. At the age of ten, in the fourth grade, his teacher began to give considerable attention to his "speech handicap," taking it upon herself to excuse him from recitations, etc He states that he remembers not wanting his teacher to overhear him talking to the boys on the playground because he did not stutter when talking to them In the following grades the stuttering was not at all severe and recitations were not avoided until the eighth grade, in which he was placed after the sixth Here he did not feel he could cope with the older boys, asked to be excused from an oral report and thereafter refused to recite before the class In high school the "stuttering" manifested itself as a "sort of trembling in his voice" He asked his mother to speak to the teachers and principal so that they would not call on him and writes in his autobiography that "they were all wonderfully sympathetic" In the later years in high school he began to avoid a good many speech situations and became more and more introverted His stuttering, however, in the main was worse at home than in any other situation

On arrival at the Iowa Speech Clinic he seemed quite sorry for himself, although stating, without being asked, that he did not want sympathy His handedness was shifted and the "bounce pattern" [2] attempted before taking up the present therapy His stuttering was severe at this time accompanied by many marked facial grimaces He had made very few friends in his six months at Iowa and

[2] The bounce pattern is a voluntary easy repetitive pattern substituted for the strained stuttering reactions which most adult stutterers present

had little recreation   He listed ways that stuttering was a help as getting out of recitations in class, getting attention and sympathy as a child, "made me a favorite of the teacher," "gave me a certain satisfaction because I was able to get out of things "

Interpretation   The overprotective and speech-conscious attitude of the parents appears to be responsible for the speech difficulty of this case, which his parents, but not himself, were aware of as being abnormal   It was not until his fourth-grade teacher reacted to it as if it were a handicap that he actually had difficulty in speaking and what could properly be called stuttering   Overdominated and over-protected as a child, encouraged to fear most things, his goals in life centered around protection against the unknown, sympathy, and attention   He found his speech able to bring him some of these at first, but on approaching adulthood they began to fail him among friends of his own age of both sexes so he withdrew from social activities but kept up his severe stuttering at home, where he could still find them   On coming to Iowa the same needs of sympathy and protection were evident and stuttering was being used as an attempted method to attain them

CASE 5, RAYMOND

Age 20, male, short, and slight build   Background of adequate socio-economic status in a small Midwestern town   Sophomore at college

Raymond was the older of two children and was the only child for a period of over five years until a sister was born   During this early period he was not only the center of his parents' attention but also was given a great deal of attention by an uncle, aunt, and two older girl cousins who lived next door   He spent consider-able time with his mother, going everywhere with her, particularly to many church meetings   During this period he developed a very characteristic "stubbornness," insisting always on getting his way   He was also able to control playmates through his superior collection of toys   Almost immediately following the birth of his sister, four new behavior characteristics appeared   He had to have either his mother or father hold his hand or he could not fall asleep   He was bothered by nightmares, usually of being overpowered by some irresistible force   He would awaken often in the middle of the night and his legs would ache so that his mother would have to get out of bed and rub his legs until they stopped aching   He writes in his autobiography that an interesting thing about these aches was that they would often start in one leg or foot and change to the other leg or to another part of the same leg   He also began to stutter shortly after the birth of this sister   About the second grade he became very conscious and sensitive to his small size and began to compensate by aggressiveness, mainly on a verbal level, towards bigger boys and by strong attempts towards athletic achievement   It is significant that as a fielder in baseball he would carefully and consciously calculate where the batter might be expected to hit the ball and then move as far in the opposite direction as possible so that it should not look so bad when he missed the ball   He did well in school except in those classes where he would rebel when the teacher was domineering and very authoritative   In high school he was quite active in service and academic pursuits, particularly in the senior year, although somewhat inhibited socially Following high school he went to Iowa to combine college and work on his speech

Speech History   Hesitation in speech began somewhat after the birth of his younger sister   It apparently appeared along with a generalized emotional insta-bility as shown in the other symptoms, mentioned above, that appeared at the same time   The displacement at home was almost immediately followed by the frus-tration of having to go to school and share the teacher's attention with twenty

other pupils He reports he was a good reader but became very nervous waiting for the teacher to call on him and when his turn came his voice would break and he would have repetitions At ten years he was brought to the Iowa Clinic and advised to change his handedness, but he resisted this treatment and according to himself and his mother it made him very nervous, almost hysterical, and his speech became considerably worse During certain periods in high school, particularly the last year, and on one summer vacation his speech was very good The first year at Iowa it was quite erratic, with observable good and bad periods

At the beginning of treatment he was somewhat hostile His speech was still characterized by periods of fluency, but when stuttering his facial expression was one of effort and upset He was beginning to go out with one girl rather steadily and within a short period reached a point where he never stuttered when with her His listing of helps and handicaps of stuttering clearly demonstrated that his use of stuttering was to protect him against situations which he could not dominate He reported that he felt "handicapped" by stuttering because he could not criticize or disagree with people or because he could not give directions, but the only aid that stuttering might have given him he listed as preventing him from "giving hell" to someone when he was angry

Interpretation It seems that when displaced by his younger sister this child, already exhibiting marked signs of pampering and attention-getting mechanisms, showed a tremendous amount of insecurity as evidenced by his nightmares of being overpowered and the many mechanisms to maintain the parents' attention and love It is not clear whether the "stuttering" first served the purpose of attention getting or only appeared at the frequent periods of emotional upset It is clear that it soon became a method by which he excused himself for not always dominating everyone around him as he was accustomed to do before his sister was born and before going to school In later periods this could be given up in situations where he was able to feel secure and maintain some position of dominance

CASE 6, EDWARD

Age 20, male, good appearance and pleasant manner Southern city background of good socio-economic status Junior at college, in school of business

The second of four children, he maintained the position of youngest child for over four years until the third child was born He was the favorite of his grandmother and favored by the mother because he was quiet and docile His older brother was aggressive and made very good grades in school while the subject repeated the first grade in school because his mother thought his grade of C was "terrible" During his very early life as well as throughout his later life he never demanded or achieved any independence and was always willing merely to do whatever he was told to do One very early memory concerns an accident that befell him when taking his turn in some building project with other children, another concerns a disappointment due to the precedence of his older brother in some desired activity Throughout school he was quite timid but achieved some recognition due to his willingness to agree with everyone and his lack of aggressive reaction towards any kind of teasing In high school he was quite active in a social fraternity At Iowa his grades were mediocre and often quite poor His main interest and sole source of satisfaction lay in his social fraternity life

Speech History. His first "stuttering" experience was quite dramatic and clear cut He had no trouble with speech until the fourth grade, when the family moved and he was transferred to a new school with strange people and surroundings When called upon to read he was simply unable to say anything due to

emotional blocking Succeeding reactions were similar and his mother went to school that semester to ask the teacher to refrain from calling on him because of his stuttering This speech phenomenon, at first strictly localized to the classroom, began to appear in other situations but was not too severe He also recalls guilt feelings over speaking to the other boys around school without stuttering and fearing that the teacher would overhear him and no longer excuse him from class recitations His subsequent history is one of not too severe stuttering but considerable worry and feeling of being handicapped For a short period in college he had the experience of simply deciding one morning to stop stuttering and did stop for several weeks but was unable to remember the incident that got him started again He had tried various therapies at the Iowa Clinic his first two years without much change in his condition and then gave up work on his speech He stated he was unable even to imagine situations where his stuttering made no difference or was any help but listed in long detail situations of past, present, and future in which it was a handicap with the major emphasis on present social situations

Interpretation It appears that, from preschool days on, this subject has set his goals around the desire for affection and the desire to avoid competition Discouraged by the successes of his aggressive older brother, he chose to avoid attempting anything on his own rather than risk failure His stuttering began as an emotional block to a difficult situation where he had already been impressed with his inadequacy The recognition that this speech blocking could be used to escape the competition of school achievement was the stimulus for his continuing the reaction of speech blocking and its spread to other activities In later years his effort for recognition of a social kind was not markedly disturbed by his slight stuttering and the stuttering served the purpose of accounting for any failures or lack of achievement in "dating" or fraternity status The problem of occupational adjustment after college was largely neglected through this feeling of being handicapped so that nothing could really be expected of him

CASE 7, LAILA

Age 22, female, neat and pleasant-looking Parents Norwegian of adequate socio-economic status Sophomore in business school

An only child, her preschool history is one of overprotection Before entering school "sensitiveness" and shyness were already well-developed traits Her playmates were always carefully selected Throughout this preschool period she was allowed to play only with one little boy, as the other children were too boisterous Most of the time she was content to play by herself Another girl her age often came to visit at her house but she remembers that she was afraid of this girl and would play with her only if her mother stayed in the same room She could give no specific situational memories of this period Her earliest memory was playing in the schoolyard with some girl who fell and hurt herself When five the family moved from a small South Dakota town to one in Minnesota where her mother's family lived. During this year she had constant attention from a large number of aunts and uncles She felt uneasy upon entering school despite the fact that she liked the things they did there At this time she was six years old and could speak only Norwegian. However, other children in the class were similarly handicapped Her history throughout elementary and high school was one of fair grades, sensitiveness, shyness, and little contact with other children From high school she went to the State University of Iowa, entered the business school, and made average grades

Speech History. In the first grade when entering school she was faced with the

double handicap of not speaking English and with a shift in handedness from left to right by her first-grade teacher However, up to this point and for the following year she did not stutter Her first memory of stuttering was in the third grade She reports that "the teacher was nice to me at the beginning but when the children laughed at me when I recited in class, she did not seem so friendly to me" From then on she avoided reciting as much as possible She had the most trouble when reading aloud Once in the sixth grade when reading orally the teacher stopped her and said that she was doing fine and made her read on at length She reports this as the only time she remembers reading without stuttering Her mother and a teacher both state that they thought that the cause of the stuttering was feelings of inferiority and nervousness In high school she wrote out all her oral reports, a practice started by one of her English teachers, of whom Laila says, "I felt at ease with her more than my other teachers because I knew she knew about my defect, and felt sorry for me" At all times she was very self-conscious concerning her stuttering and grew increasingly so throughout high school

Upon going to the University she was away from home for the first time in her life and soon did not stutter at all in conversation or oral recitation, without any therapy being attempted She did, however, still show clonic spasms when reading aloud in any social situation, and had been subject to therapy for this "stuttering" At the time of this report she had several friends at the dormitory where she stayed, due mostly to the aggressive extroverted nature of her roommate When asked to list ways that stuttering was a help she listed only under three separate heads things she could have done were it not for the fact that she stuttered and a great many situations she avoided At no time did she show any "stuttering" in conversational speech She still was markedly "sensitive" and blushed profusely.

Interpretation The personality picture of withdrawal, shyness, sensitiveness, and fearfulness was well marked before entering school and was coupled with a history of overprotection and absence of any competition in her life This lack of competition could well account for her uneasiness in entering school When we add to this her language handicap and increased feelings of inferiority due to her change of handedness, we can see that the school situation might well have been emotionally disturbing We can hypothesize that the emotionality and tenseness accompanying this oral recitation were so great at one specific situation when called on to read aloud, in the third grade, that her emotionality became evident in markedly disturbed speech Hence the beginning of her stuttering This probably served the purpose of avoiding these situations which were looked upon as "tests" and in addition brought the sympathy of the teacher Hence it flourished In college, removed from the overprotecting home environment, finding dormitory life congenial due to her aggressive roommate, she had little use and need for the stuttering and she stopped it She did, however, hang on to a last bit of it in oral reading, perhaps as if to keep it in case she should need it again

CASE 8, HELEN

Age 26, female, awkward in appearance At least average intelligence Attending first-year high school Acts and dresses like a girl at least ten years younger Background is marginal rural, parents poorly educated

The youngest of ten children, she states that she was the favorite of the father until she was about twelve From then on he no longer favored her She stated that after this time he began to be rough to her Her earliest memories, of which she reports a considerable number going back as far as two and a half years, are almost all concerned with her sisters, particularly the two nearest her age with

whom intense feelings of rivalry were still evident   Although it was difficult to get any precise notion of the home background, we know the family was Catholic and quite religious and that two of her sisters have become nuns   She states that the sister nearest her in age dominated her as a child and made her feel inferior   In school she was always conscious of being awkward   She left school after finishing grammar grades and worked on the farm   When about sixteen she exhibited a great deal of jealousy and aggression towards her next oldest sister and a niece of her own age who were being "taken out" by two brothers   When questioned about her sexual attitudes she replied that if she stayed close to religion she would not be tempted sexually or in other forms of sin   She had never gone out with a young man and stated that kissing was sinful   Around the home she had to work hard as all the older brothers and sisters were leaving   Helen claimed that she could not go to business school, or get married, because she had to take care of her parents, who were not very appreciative of her efforts

Speech History   Helen states that she began to have trouble with her speech around the age of ten   However, this must be something of an afterthought as nobody paid any attention to her speech as being different at this time, and she says that it was not at all prominent   About the age of fourteen it suddenly became more evident   This was at the same time that her sister and niece began to go out with the two brothers   At the end of that year she decided that the young man going out with her sister really loved her and not her sister and that she could marry him except for the fact that she was a stutterer   At sixteen she noticed an advertisement for curing stuttering by correspondence   She took this course, spending large amounts of time "doing her lessons aloud," and at the same time her stuttering became much more severe   It continued to be severe until the age of twenty-five when all of the brothers and sisters had left home and the parents were much too old to care whether Helen stuttered or not

At this time she came to the Iowa Speech Clinic to be cured of the stuttering that had practically disappeared before she came   She decided to go back to school and entered the first year of high school   At first her contact with other stutterers and the clinic as a whole exaggerated her own stuttering but after a short period she cleared up rapidly except for occasional blocks which, when they did occur, were very long and severe   She tried shifting handedness and later the bounce technique   When beginning conferences her only blocks were rare, long, easy "bounces" which were accompanied by a smile and seeming enjoyment   When she thought that she was alone she usually talked to herself aloud   She stated that she had been doing this for the last few years and that she also spent a great deal of time daydreaming   Her voice was high-pitched and sounded like that of a child of thirteen   She appeared to receive a great deal of satisfaction from working on her stuttering and followed all instructions and assignments slavishly   When asked to list the situations where stuttering was a handicap she listed a series of words on which she "always" stuttered   She was asked to read them and did so without blocking on any of them   For ways that stuttering was of some help she gave a list of easy situations   When corrected as to the assignment she finally stated that, "It has given me a deeper insight into how other people feel when they are humiliated, also a deeper and kinder understanding of their sorrows and difficulties."   After a few weeks of conferences she was told casually that someone who had heard her talk did not think that she was a stutterer   The following day when in "stutterers' class" she was called on to speak and said quite angrily and fluently, "I hear that there is a rumor that I have stopped stuttering and am no longer a stutterer and I would like to find out who the person is who started it

because it certainly is not so " This fluent outburst was then followed by a very long bounce accompanied with an expression of great pain

   Interpretation This girl shows many neurotic signs entirely apart from any stuttering Her complete isolation at the time of coming to Iowa, the excessive phantasies, the desire still to be a child and her consequent childlike behavior, her strong feelings of inferiority and her sexual inhibitions, are some of them The stuttering arose just about the same time that her father no longer favored her but began to be rough towards her It increased when competition with her sister and niece began to enter the heterosexual field and immediately became an excuse for her own lack of success in that field The advertisement in the magazine convinced her even further that this was a good way to protect herself against a feeling of being a failure and she spent much time with her lessons bringing the stuttering to everybody's attention as much as possible When there was no longer anyone at home to impress with her handicap the stuttering became less severe and she first decided to come to Iowa Once at Iowa her speech became worse as she found a new group whom she could impress with her handicap, but improved rapidly as such behavior brought social approval However, she would improve only so far and no further, possibly having no intention of ever giving up this mechanism unless an equally good one be substituted for it

DISCUSSION OF CASE HISTORIES

   In reviewing these case histories certain common points present themselves. Perhaps the most striking of these is the wide variations in speech from severe stuttering to none at all This is evident in both the ontogenetic and cross-sectional history of the individual One stutterer may have blocks with one individual and not with another; one may always stutter when speaking over a phone, another never, one more at school and one more at home, and for all of them there are periods when they did not stutter at all or only very slightly and periods when their stuttering was very severe In fact we might almost say that this variability is one of the most characteristic behavior reactions of stuttering and that the key to understanding stuttering as a whole, or the stuttering of any single stutterer, lies in understanding the nature and reasons for these variations It is immediately apparent in all these cases that no physiological, "habitual," or heredity theory can account for these variations However, they did follow in every case clear-cut psychological lines which could account for both the long-term and immediate, daily variations Such a psychological explanation was always in terms of the stutterers' goals and their feelings of adequacy or inadequacy.

   A second outstanding similarity in these cases is that at the onset the stuttering always seemed to come from "without" rather than

from "within" That is, the child never seemed merely to have something happen to his speech either gradually or suddenly due to some inner physiological condition, but what did occur was that some event or series of events changed his own attitude to the speech he had always had None of these cases started to stutter without first discovering that interruptions in speech had some very definite effect on the people around him It may be that in several of these instances the teacher and parents were simply reacting to the child's general state of upset rather than to the speech alone However, in these cases the child felt they were reacting to his speech as that was the most dramatic manifestation of the emotional disturbance Many children, however, go through similar experiences and do not become stutterers Any·theory of stuttering must also allow for other factors which will account for the continuance of these interruptions in some cases and not in others

The manner in which "pampering" operated in the development of stuttering seemed also to be clearly indicated in all these cases [3] It appears that the pampering has an indirect effect by giving rise to fears and feelings of inadequacy or inferiority which result in emotional breakdown, under certain conditions, and the consequent inability to control speech. The child pampered at home meets situations outside of the home in which he is treated differently These act as traumata and the feelings of inadequacy center about the very thing the child has always received the most of but suddenly feels he is no longer receiving

In the case of all these stutterers some such need was served in the beginning and during the course of the stuttering That is to say, after the stuttering reaction became available to the child and took on some special meaning, such as, "this will excuse me from recitation," or "this will bring me a great deal of attention," or "this will make my mother concerned over me so that she has to protect me even more," or any other, the speech reaction persisted if it fitted in with the particular needs of the child at that time. ·

A fourth striking element in all these histories lies in the general-

[3] Pampering was defined in the earlier article already cited as including " those types of behavior that are sometimes called babying, spoiling, over-protecting, etc It can be described as that type of training which affects the child so that he becomes dependent on others to do things for him and to solve his problems, so that the child feels inadequate to solve his own problems successfully "

ity of the attitude towards stuttering The subject who used stutter-
ing as a rationalization for failure had many other mechanisms
by which he rationalized failure The subject who developed
stuttering following displacement by a younger sister also developed
many other mechanisms unconsciously designed to retain control
of the parents To use an expression of Adler's, we can say that
the stuttering and the attitude towards it were always characteristic
of the subject's whole "style of life"

UNDERSTANDING STUTTERING

An examination of the experimental literature as well as clinical
evidence points to the impossibility of defining stuttering simply in
terms of speech alone. Many so-called normal speakers have more
frequent and longer speech blocks or interruptions than some
stutterers Cases have even been reported of people coming to a
speech clinic because they were afraid that they would "stutter"
but who actually had quite fluent speech

Of the eight cases included in this study seven could talk to
themselves when absolutely alone without any speech interruptions,
the eighth had occasional interruptions, however much less than
usual This finding has been duplicated in other clinics. This is
only one of a whole wealth of facts that point to the inadequacy
of either defining or understanding stuttering merely in terms of
speech mechanisms The definition to be given here is in part
suggested by the work of Wendell Johnson *Stuttering is defined
as a rhythmic disorder in speech in a person who is aware of his
speech as being different from that of other people and who reacts
to it as if it were a handicap.*

It is also necessary to define the work "need" which has already
been used frequently. As used here "need" is not to be confused
with the term as applied to connote a relatively undifferentiated
physiological state It seems sufficient for present purposes to define
a need as *a behavioral tendency to attain a particular goal or com-
plex of goals of which the individual may or may not be aware.*
That is, a need is the behavioral coordinate of a goal.

This theory states that in order for a child to begin stuttering
two simultaneous conditions must exist. These are the availability
of stuttering and the need for it By availability is meant some
meaningful contact with the phenomena of stuttering so that a

definite attitude is taken towards interruptions in speech through
the behavior of the people in the immediate environment   So, the
child who has a relative or close friend who stutters, and who is
treated in some characteristic fashion by the people around him,
has stuttering available to him   The child who has never heard
the word "stutterer" but is causing concern and comment from his
parents or teachers because "he is speaking too rapidly" or
"stumbling over his words" has stuttering available to him.   The
child who finds people reacting to his own emotional states with
their consequent loss of speech control and the child whose speech
pattern is hesitant either through training or organic causes, and
sooner or later finds that he may belong in a special class of people
due to his speech, have stuttering available

The need is not for stuttering as such but for a mechanism which
will serve some definite purpose   So, the need exists with the child
who wishes to avoid the painful situation of reciting, for the child
who wishes to gain attention, for the one who wishes to wrest
back control of the parents from a sibling, for someone who finds
it necessary to find an excuse for a particular failure, and then for
all future imagined failures, it is present in the child who wants
to convince his parents that he requires more protection than he is
getting   It might be argued that such needs are present with
almost all children, but in order for them to result in some such
behavior as stuttering it must be so great that other goals such as
direct achievement and the admiration of other school children are
willingly sacrificed for this more important one

For stuttering to persist it must serve some important purpose—
one that is in keeping with the whole experiential history and with
the whole organization of the personality   This purpose may
change with time; it may remain and others be added, it may
remain constant, or it is possible that the need may disappear in
the adult and the stuttering remain   In the latter case the habitual
speech pattern persists but this may change slowly to become less
and less unusual or will be cleared up entirely by almost any kind of
therapy   The fact that almost any treatment, no matter how wierd,
will result in some permanent cures is accounted for here by the
cases we consider as those where the need has disappeared.[4]   In
these cases the environment, so to speak, forces the individual into

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[4] Sometimes, however, it is also possible, under conditions of strong suggestion, for the
subject to give up one mechanism and to substitute another

a situation where the defense is no longer necessary Some good man or woman, for example, shows them that they need not defend themselves against the thesis that "no one loves me"; or, as in the case of the stutterer who received a job teaching because of the shortage of commercial teachers, they no longer need to defend themselves against the feeling that they cannot cope with the world themselves, and, as he did, they may give up stuttering completely In most cases the actual purpose changes or at least takes on additional meanings What may start as a method of gaining attention may become a means of protecting oneself against the feared failures in the realms of sexual and occupational achievement [5]

It is apparent that this theory did not arise solely out of an examination of these eight cases and the experiment that motivated this study, but from clinical experience with many cases of stutterers and nonstutterers and contact with the literature in the field of psychology and stuttering. It is impossible to discuss all or even a large part of the theoretical and research literature on stuttering in relation to this theory, however, it is necessary to examine certain main lines of evidence

Other extensive, published case histories seem to fall as easily into this framework as the eight given here For example Johnson's (4) autobiographical history and the cases published by Brown (2) contain all the necessary elements outlined above

The evidence from the many physiological lines of work at first seems to oppose such a formulation However, there are two important characteristics of these studies to be considered The neurophysiological disturbances are not consistent from stutterer to stutterer nor are they consistent within the individual Just as a hand functions differently when it is lifting a ten-pound weight than when lifting a one-ounce weight, so does the neurophysiological mechanism function differently when the individual is stuttering than when he is speaking normally The mistake lies in believing that the physiological difference is the cause of a

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[5] It has been stated at times that the stutterer does not stutter because he is insecure but is insecure because he stutters Although in this paper we have tried to relate insecurity to the etiology of stuttering we must admit that there is some circularity in this relationship The individual who has already begun to stutter (in other terms, one who has already developed secondary reactions) finds, particularly as he approaches adulthood, that the stuttering brings considerable punishment Under these circumstances he may stop stuttering, as many do, or, becoming more insecure, he may lean even more heavily on his "handicap" as a defense mechanism

psychological act[6]   The individual may learn to perform the motor acts which produce blocking or repetition just as well as he learns those which lead to "normal" speech and probably is just as much unaware of how he has learned to hesitate as he is unaware of how he has learned to speak fluently   It is obvious that an unlimited number of possible acts can cause speech interruptions, and in studying stuttering we find just such an endless variety   It has been clinically demonstrated many times that one can easily change the way in which a particular case stutters   *The studies on physiological dysfunctions give part of the description of how the individual stutters but do not relate to why the individual stutters.*

Concerning the alleged number of stutterers whose handedness had been shifted it should be pointed out that for every stutterer who has been shifted there are anywhere from ten to sixty people (estimates of the number of people born left-handed vary widely) who have been shifted and who do not stutter   It is clear, however, that the emotional upset of such a shift might in some cases provide a basis for the frequent affective breakdowns of which we have spoken

The evidence from studies on the importance of psychological factors in the moment of stuttering[7] emphasizes the learned nature of the stuttering reaction and throws light on the question of why a stutterer stutters on certain words and phrases rather than others, but an understanding of the amount of stuttering in any larger behavior segment requires, as many other studies have shown, an understanding of the social situation as a whole and the emotional reactions of that particular subject to that situation

A question almost sure to arise concerns children who begin to stutter from the beginning of speech or at early ages of two, three, or four years

The work of Steer (7), Johnson (5), and Davis (3) shows that the speech of these so-called early stutterers, at time of first diagnosis of stuttering, is not significantly different from that of children of the same age who do not stutter   What is different, to a large degree, is the attitudes of parents toward these children   The easy

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[6] It must be remembered that the hysterically blind actually cannot see, and that a hysterically paralyzed limb is in a different physiological condition from one that is not paralyzed but the physiological change is not the important factor in understanding the hysteria

[7] Many of the series of articles on the "Psychology of Stuttering," written or directed by Wendell Johnson, *J. Speech Disorders*, 1938, 1939, and 1940, are excellent examples of such studies.

bouncy repetitions of children are normal and are not similar to the phenomena we are treating here as stuttering Further, it seems that many stutterers who state that they have stuttered since the beginning of speech or from a very early age, when questioned, report that they themselves have no memory of such stuttering but the parents looked back in retrospect and did remember that "Johnnie did seem to have trouble before" Any parent can look back at the speech of almost any child and come to the same conclusion

The baffling question of why we have so many more male than female stutterers appears to have at least a theoretical solution along these lines The earlier published article suggested that differences in training due to sex, differences which were minimized in the only child where the sex ratio was reduced, were an important factor in understanding the sex difference in frequency of stuttering The goals that have to be given up in order to stutter may be more important to girls than to boys due to general cultural differences in our training of the sexes

This discussion of various lines of evidence is not presented as proof of the theory, but more as a suggestion for further research. The specific needs or modes of availability listed are not intended to be all-inclusive nor is the factor of pampering believed to be operative in every case Neglected, hated children, or children with organic defects may develop a strong need for a defense such as stuttering presents. Many questions remain to be answered Exactly what are the factors in training which produce these different systems of values between the sexes? How slight may the need be when the availability is very great? How weak may the availability be when the need is very great? The discussion may seem to slight the factors of availability but this is not the intention. In fact, the abundant evidence of how stuttering appears to run in families is taken here not as an indication of the inheritance of stuttering but as an indication of the importance of the psychological factor of availability.

There is nothing strikingly new about such a theory. Authors too numerous to mention have written about one or the other of these factors. If there is anything at all new about this theory it lies in its synthesis of two points of view and its systematization. It represents a framework not simply for stuttering but for all similar behavior disorders.

THERAPY

Once a person has stuttered the availability is always present Any effective and lasting therapy, then, must concentrate on the need, although in some cases it may be necessary or at least a wise therapeutic measure to carry on some parallel work in the mechanics of speech

If we accept the idea that the stutterer is using his stuttering as a defense of some kind and that he wishes, therefore, to protect the rationalization "that he can't help stuttering" (*i e*, by relating it to some physiological or hereditary cause) and will react emotionally to any theory that will "expose" this mechanism, we can develop more specific suggestions as to the procedure and nature of an efficient therapy What will be described here is the actual procedure used on the first five cases described earlier.

The first step was the gathering of information After several sessions of this the subject was forced without the therapist's doing anything but asking questions to reevaluate to some extent his own history and his rationalizations concerning stuttering The first specific technique suggested was for the stutterer to do one hour's oral reading every day After a few days he was told that the only purpose of this was to emphasize to him the fact that he did not have to stutter, and that if he was to understand his own stuttering he must look to psychological factors in terms of the situation that he is in A second phase of the therapy was to go into the stutterers' own theories as to the nature of their stuttering or stuttering in general, discussing other therapies that they had been subject to, evaluating experimental evidence, and discussing cases No effort was made at this stage to interpret their own history in full The cases talked about were ones with elements common to their own history. Soon all these subjects were aware that perhaps a similar interpretation would apply to them. Cases were also examined who showed "personality disorders" other than stuttering The general concepts of need, purpose, compensation, inferiority feeling, insecurity, etc., were analyzed. Reading assignments to literature in the field of personality theory and of stuttering were made and the material discussed.

The third phase of this therapy was that of interpretation The

subject's entire history and his day-to-day experiences were examined in terms of the theory already outlined

At this time a group therapeutic situation was introduced   The five cases met once a week for two hours in addition to the three regular weekly individual interviews   Approximately the first half of that time was spent in a discussion of some abstract concept such as "style of life," "pampering," "preparation for a goal by building a defense in advance," "control through weakness," and others   The latter half of the session was taken over by one of the five, who discussed his own speech history in relation to the preceding discussion   This appeared to be a very valuable part of the therapy   It served to objectify the stuttering of the subject who was giving his own history and to strengthen the acceptance of the interpretation along similar lines by the others   They asked each other questions and tried to outdo each other in the extent to which they were able to probe beneath the surface for purposes and psychological motivations   The entire time spent with these cases was about three months, including the taking of histories which took up the first month

In addition to the continuation of the interpretation phase and group sessions the last month was devoted mainly to building new, constructive attitudes   The old attitudes were described as a mistaken view by which the adults were meeting present-day situations with the same reactions they had had to childhood situations   They were encouraged in their ability to speak normally and to face life situations in the three fields of human endeavor—sexual and marriage, occupational, and social—without the need of the defense mechanism which they had used to avoid these situations   They were also directed to turn their attention away from themselves to the situation and ideas they wished to express   Specific "difficult" situations were examined objectively and the subjects were usually able to face these situations armed with a new attitude with little or no stuttering   Programs for dating, establishing friends, changing from an egocentric to an extrocentric social point of view, and planning for an occupational adjustment were instituted and carried out

As the therapy progressed general factors of adjustment were stressed more and more and the emphasis changed from that of stuttering therapy to a personality therapy wherein stuttering was

used as an example of one of the individual's characteristic behavior reactions, a reaction which was related to and expressive of the personality as a whole

In general, the results of this therapy give, at least, permissive evidence of the validity of the theory and therapy outlined here. At the conclusion of the study two of the cases (2, 3) did not stutter at all and were not stuttering after a period of one and a half years, when the last report on them was available   Both after the conclusion of the therapy and after a period of one and a half years, cases 1 and 5 are described by themselves and by the head clinician as no longer regarding themselves as stutterers nor feeling the need for any work on their speech, although they occasionally still have slight interruptions   The fifth case has improved his attitude towards his speech considerably, although the same improvement was not fully paralleled in his speech   However, in this case an additional three weeks would have been necessary to cut all intellectual and emotional ties to a shift-in-handedness therapy which he had completely accepted just prior to the beginning of this therapy   Unfortunately the extra time that was necessary in this case was not available

SUMMARY

A working hypothesis for the understanding and treatment of stuttering has been presented in outline   The hypothesis is based on an intensive study of eight cases and an analysis of some of the experimental data in the field.   The hypothesis arrived at is a general principle that holds for *all* stutterers rather than a statistical concept   The theory represents a systematic framework, in terms of availability and need, in which stuttering as well as many other behavior disorders may be viewed and which, rather than answering the experimental problems in the field, perhaps opens new ones.   The theory presents a framework in which individual stutterers can be studied rather than one which attempts to give a single explanation for all stuttering   The therapy based on this psychological interpretation of stuttering is elastic and suited to the individual taken as a whole and not simply to the single symptom we call stuttering.   It attempts, in most cases, to cure stuttering without relying on any techniques which are concerned purely with the mechanics of speech production.

REFERENCES

1 ADLER, A   *Understanding human nature*   New York Greenburg, 1927   Pp 48–49
2 BROWN, F W   Personality integration as the essential factor in the permanent cure of stuttering   *Ment Hyg ,* 1933, **17**, 266–277
3 DAVIS, D M   The relation of repetitions in the speech of young children to certain measures of language, maturity and situational factors   *J Speech Disorders,* 1939, **4**, 303–318
4 JOHNSON, W   *Because I stutter*   New York Appleton, 1930
5 JOHNSON, W   The role of evaluation in stuttering behavior   *J Speech Disorders,* 1938, **3**, 85–89
6 ROTTER, J B   Studies in the psychology of stuttering   XI Stuttering in relation to position in the family   *J Speech Disorders,* 1938, 3, 143–148
7 STEER, M D   Symptomatologies of young stutterers   *J Speech Disorders,* 1937, **2**, 3–13

SYMPATHETIC PENNIES· A RADIO CASE STUDY

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O N THE evening of January 23, 1943, the radio broadcast of the "Truth or Consequences" program contained an episode that was interesting in its relationship to certain problems of social psychology "Truth or Consequences" is a popular Saturday evening quiz program which enhances its entertainment value by requiring the person who has failed to answer the question correctly to pay a "consequence" which usually consists of doing something ridiculous or humiliating On this particular broadcast the contestant failed to give the correct answer to the question and the consequence imposed for the failure was a request to the listening radio audience to send pennies to the contestant, which she in turn would transmit to a bank

The dialogue of the two participants, the questioner and the contestant, as reproduced in its entirety from a stenographic record, is as follows. [1]

Q   Sit right down, Mrs Mullane [2]   She's probably sitting down by now   This is Mrs D J. Mullane

Q   Hello, Mrs Mullane   That is spelled M-u-l-l-a-n-e   Where are you from?

C   Staten Island

Q   From Staten Island   Your occupation?

C   Housewife

Q   Now we've interviewed several mothers with sons in the service and you were our first selection in that group, Mrs Mullane   If you tell the truth, we'll bring up another mother to see you   If you don't, your consequence may be very pleasant   See if you can answer this   "How many kings of England possessed the name 'Henry'?"   Truth or consequences   No snitching in the audience

C   I believe it was five
    (Noise to denote wrong answer)

Q. There were eight   Oh, you'll be very happy   Mrs D J Mullane of Staten Island, that's West Brighton, Staten Island, now you haven't told the truth, so here are the consequences   Where is your son stationed?

C   New River, North Carolina

Q   New Liver, New River, North Carolina   They've gotten me off to a bad start tonight   You understood what happened, didn't you?

C   Yes

Q   I was out two minutes in the audience and they didn't tell me about it   All right, how old is he?

C   Seventeen

Q   What is his name?

C   Harold

Q   Harold Mullane   All right   Well, as you undoubtedly know the government is anxious to—what is he, by the way?   If he's in New River, he'd be a marine, wouldn't he?

C   He's a marine, yes

Q   I see   He volunteered recently, I suppose

C   Yes   He's been in since August

(Applause from the audience)

Q   We are proud to know you   As you undoubtedly know, the government is anxious to get copper pennies into circulation   Everybody is being asked to empty their penny banks and exchange their pennies for silver   You know that, of course   Now we're going to kill two birds with one stone   We're going to ask every person listening to put a penny in an envelope and mail it to you   And your consequence is to open the envelopes and take the pennies down to the bank and buy a bond for your son, so you'll have a nice savings coming to you when he's back home again after the war   Is that all right with you?

(Applause from the audience)

Q   I warn you that there are millions of listeners to this program and they're doggone loyal   They really are   Every single one backs us up   If each one puts a penny in an envelope and mails it to you over there at West Brighton, 52 Moody Place, West Brighton, Staten Island, if they do that, what's his name, Harold, will have quite a nest-egg and a lot of pennies will be in circulation   Give us your name and address so people can send their pennies.   Just one penny in an envelope for each person   Will you spell it, please?

C   Mrs D J Mullane

Q   That's spelled M-u-l-l-a-n-e

C   52 Moody Place

Q   That's M-o-o-d-y, Moody Place   52 Moody Place

C   West Brighton

Q   West Brighton, B-r-i-g-h-t-o-n

C   Staten Island

Q   S-t-a-t-e-n Island   And then that's New York.

C   New York

Q   All right   Now each listener can help out two ways by putting a penny in an envelope and mailing it to Mrs Mullane at 52 Moody Place, West Brighton, Staten Island, New York   It will be putting thousands, maybe millions, of copper pennies into circulation, and the money received will be used to buy bonds and Harold will have a pleasant outlook for the future when his fighting

days are over—all because you folks sent a penny to that address Of course
then, Mrs Mullane, your consequence is to tally all the returns   You'll prob-
ably have every room in the house filled with letters   And be sure to let us
know how the folks respond so we can announce it next week over "Truth
or Consequences "

C   I certainly will

Q   I know one marine who is going to be mighty happy

On the Monday morning following the broadcast letters contain-
ing pennies began to arrive at Mrs Mullane's home   By Tuesday
morning the volume of letters overtaxed the local postal delivery
service, and a call was sent to the sponsor of the radio quiz program
Arrangements were then made to have the letters delivered to the
New York City office of the sponsor   Mrs Mullane's telephone was
continuously ringing, and friends and neighbors came to her home
in person to deliver their pennies   Before Tuesday night the letters
numbered into the thousands and had to be delivered by the truck-
load   For the next several days letters continued to arrive in
increasingly larger numbers   It became necessary for the sponsor
of the quiz program to recruit a staff of 200 clerks to open the
letters and to remove and count the pennies   There were 112 sacks
of mail containing 204,200 letters   The letters contained 300,157
pennies which when put into bags amounted to 27½ bags [3]
Letters were received from all states of the Union, many provinces
of Canada, Mexico, the West Indies, and even a few from England
and North Africa sent by American service men   As the letters
were opened nickels, dimes, quarters, and occasionally half-dollars
and dollar bills, in addition to the thousands of pennies, fell out.
The pennies and other coins had been placed in the envelopes in
an amazing variety of ways, prompted undoubtedly to some extent
by the general instructions of the U S. Post Office not to insert loose
coins in an envelope   About a dozen pennies were received, how-
ever, simply attached to post cards without being enclosed in
envelopes   Coins were glued on, wired on, and in many instances
painstakingly sewed onto pieces of paper and cardboard for inser-
tion into the envelope.

Almost half of the envelopes sent were found to contain personal
messages addressed to Mrs Mullane. The contents of the messages
showed that people from all walks of life had been induced to
respond. A large proportion had been sent by the mothers of sons

[3] *Printers Ink*, as officially reported in issues of March, 1943

in the armed forces, but many had also been sent by other members of servicemen's families   The messages sent by women greatly outnumbered the messages sent by men   Servicemen's letters were frequently found, and some from business and professional men The messages were written on anything from small scraps of brown wrapping paper to monogrammed and professional or business-head stationery.

The contents of the messages presented an interesting set of data for psychological observation   Many simply contained wishes for good luck, such as "Good luck to you and the marine"; "Here's wishing you both good luck "   A plea for divine protection sometimes appeared in the form of "God bless the marine" and "God protect your fine son and return him to you "   Other messages contained words of sympathy and understanding   Statements such as these were frequently included·   "I know how it feels, I also have a son in the Marines (Army or Navy)", "I am a mother who is also waiting for her son", and "You are doing what every mother wants to do for her son "   Some messages were expressions of patriotic appreciation to a mother with a son in the armed forces. Letters containing long messages usually carried expressions similar to those listed above, but in addition included detailed reports of the personal life of the sender

It is evident that the participation of a mother of a marine in the radio quiz program and the enlistment of the support of the audience in the payment of the "consequence" were potent stimuli to motivational systems within the listeners who heard the program What these motivational systems were and the bearing that they have upon the attitudes of the American people at war are questions that the writer will now examine

The radio broadcast had occurred only a few weeks from the day that the government had announced to the public the withdrawal of the Marines from Guadalcanal and their replacement by units of the Army   It was thereby revealed that it was the Marines who had launched the attack against the Japanese and had won the impressive victories   The Marines in the eyes of the public were the heroes of the hour   The report in the broadcast that a marine would be the recipient of the pennies, therefore, had a significant timing.

Some listeners may have sent pennies simply in response to a desire to "follow the crowd," i e , to do something that many others

would probably do   Others may have responded through a patriotic desire to help in the war effort by furnishing the copper which the broadcast announcer alleged the government needed   That these were not the only motives that induced the majority of the audience to send pennies, the writer believes, is indicated by the fact that so many responded with sympathetic messages as well as with pennies. This entailed an expenditure of time as well as the three cents for postage to send the pennies   A few persons sent the letter by air mail or special delivery

The writer is of the opinion that the motivational system to which the radio program appealed was that of sympathy for the mother of a serviceman   It is possible, therefore, to study at least indirectly the strength of sympathy as a motivational force in the American people at war through the number and forms of response to the radio broadcast described above   Sympathy, it would seem, because of its very complexity, can be most adequately considered from the field-theoretical viewpoint. Murphy from the study of sympathetic behavior in nursery-school children concluded that there is not only one definable form of sympathy, but at least several [4] Sympathetic behavior, she says, may be a habit; or may depend upon identification as Freud has theorized, or may be a "warm attitude of feeling towards others"; or may be "a spontaneous response to distress " In considering that sympathetic behavior may involve all of the above characteristics, Murphy concludes: "The common ground of sympathetic behavior lies in seeing and feeling the distress as the other person sees and feels it, and in doing something about it which he would want done "

The characteristics of sympathy as outlined by Murphy apply with full significance to the underlying motivation of the radio audience   This explanation, however, might be advantageously integrated with the field-theoretical approach   The following statements of Koffka demonstrate the pertinence of this approach: "Everywhere we found actions not only released, but also guided or steered by forces residing in the total field," and "Action springs from stresses within Ego systems   ".[5]

To concretize the application of the field-theoretical approach to the phenomenon described above, it might be pointed out that

[4] Murphy, L B   *Social behavior and child personality* New York Columbia University Press, 1937   Pp 284–285
[5] Koffka, K *Principles of gestalt psychology* New York Harcourt, Brace, 1935   P 658

the conscription of millions of young men for military service has
created new systems of stress in many personalities, especially in the
members of servicemen's families   Persons have also become aware
of a group membership composed of those who have relatives and
friends in the armed forces   It would be expected that many
emotions and attitudes, including sympathy for those in a similar
position, have been structured within the framework of this mem-
bership-character.   The sending of pennies and messages to the
mother of a marine would seem to have been actuated by the
impingement of the mother's words and the announcer's appeal
upon these systems of emotional and attitudinal stress that existed
within the ego of persons who were members of the same group to
which the mother belonged

It might also be pointed out that the response which the radio
program suggested to the audience was a relatively simple one,
that is, the sending of a penny   That the sending of the penny
had a greater demand-character than the purchase of a postage
stamp is evidenced by the fact that some people spent six cents for
air mail postage or ten cents for special delivery, or contributed a
large amount of effort to make the penny secure in the envelope.

The writer believes that the sympathetic behavior of so large a
group of people for the reasons presented above is an indication of
what most psychologists would consider high morale.   Watson
states, for example, that morale is stronger when people feel mutual
support in sharing a common goal.   He expresses its significance
in the following quotation.   "The togetherness which fosters morale
is more than the fact of being in the same room or the same organi-
zation   The vital factor is a sense of shared purpose " [6]

[6] Watson, G   (Ed)   *Civilian morale*   New York   Reynal & Hitchcock, 1942   P 34

A NEUROSIS IN A MERCHANT SEAMAN *

BY SYDNEY G MARGOLIN AND LAWRENCE S KUBIE

New York City

IN September 1941 a slow freighter with a big deck load dropped anchor in Suez   The day was hot and sticky "with millions of flies"   That night the moon was full, and to a man in the blacked-out ship came the roar of planes, and then the unaccustomed sound of tracer bullets, of ack-ack, the explosions of bombs, the flare of fires, and the incessant play of searchlights

Excited men crowded on the decks   None of them had been through it before.   After the planes went away and the all-clear was sounded, they sat up most of the night.   The next night it was worse, with two raids   Night after night they kept coming   On shore or on shipboard there was no escape   They saw what bombs could do   They saw a building "crumpled apart," people carried out, limbs scattered

After ten days of it the men became restless and uneasy, and wanted to get out.   It was a wonderful feeling the day they left. Everybody began to collect fragments of shrapnel for souvenirs to take home.   None of them had been injured; and the ship was intact.

One year later, in August 1942, Joe entered the doctor's office at Union Headquarters   He was a sunburned, fair-complexioned man, well-built and well-dressed.   He spoke in a frank and unassuming manner, with a polite, soft voice   He looked depressed, but at times assumed a curiously fixed and manneristic smile   He frequently wept as he described his symptoms.

"I don't have any worries but lately I feel depressed   I keep wondering what's going to happen   At the same time I get restless and irritable   At Capetown I kept saying, 'I got to get out   I got to get to work.'   I didn't really have to at that time   Now I've been home in New York ten days   I argue with myself all the time, and with everyone else.   I am restless.   I tell my mother to

mind her own business I sleep all right, but they say I talk in my sleep about the jerries. 'Watch it now, the jerries are going to get us' My mother said, 'You're home now There ain't no jerries' I answered, 'No, there are It's much worse than it looks!' But I don't wake up She tells me about it the next morning I am restless I have got to get out So I am going to ship again I'll even take an ordinary seaman's job"

PRESENT ILLNESS

In the course of an investigation of the psychiatric reactions of merchant seamen to torpedoing and bombing (Margolin, Kubie *et al*),[1] it was observed that 25 per cent of the survivors had severe persisting reactions, and about 50 per cent had mild to moderate persisting upsets The case history to be presented here is of a 28-year-old seaman who complained of feeling depressed, and of bursts of tearfulness and irritability He was perplexed by this He saw no reason for his state of mind He was well physically He had money, and he had a girl whom he looked forward to marrying.

In the summer of 1941 he had sailed for Suez on a slow ship with a big deck-load. The boat followed the South Atlantic course around Capetown, and up the east coast of Africa That the trip was hazardous was well known "Everyone spoke of how dangerous it was." At Suez the ship was severely bombed every night for nearly two weeks.

The first reaction of the crew was a mixture of fear and excitement, plus some speculative bravado and curiosity as to whether their ship would "get it " Debates arose regarding the relative severity of successive raids Gradually, however, general anxiety increased, and all wanted to get away After leaving Suez, there was general relief and let down Joe said, "I slept all right I had no particular reaction to the bombing I guess I took it more or less lightly "

However, on arriving back home in the States he began to feel restless and soon wanted to ship out again He declared that he wasn't afraid and that he had made some friends in Suez to whom he wanted to bring some small luxuries, such as razors and magazines "I liked the excitement. I could tell the fellows what they

[1] Margolin, S G , Kubie, L S , Kanzer, M , & Stone, L   Acute emotional disturbances in torpedoed seamen of the merchant marine who are continuing at sea *War Med* , 1943, **3**, 393–408

were in for; and I could boast." In addition he had met a girl in Capetown to whom he felt drawn, and whom he wished to see again.

The second trip, which began in January 1942, was uneventful. When his ship put in to Capetown for repairs he stayed with his girl for about two weeks   She was concerned about the dangers of his work and promised to pray for him daily.   He was touched at this and resolved that he would examine his feelings about her more seriously, with some thought of marriage.

On the return from Suez, he developed an abscess in his left axilla   He had had such infections before; but he reacted differently to this one. He became restless, irritable, and anxious. He accused the mate of indifference and of improper attention to his illness. "I seem to feel that the mates don't give a good God damn about you   They only are interested in the company. I finally blew my top to the captain and he ordered me off the ship at Capetown to a hospital "

Within two weeks the infection subsided, and he returned to his girl.   Apparently she was maternal and kind to him, and devoted to his welfare; but despite his physical recovery, his emotional symptoms persisted   "One night I was in my room with my girl when suddenly I started to cry like a kid. And I was thinking all the time I was crying that nobody liked me, every one upsets me and is against me " His girl comforted and reassured him   "She did a wonderful job   She's the first woman I ever met whom I liked for reasons that weren't sexual   I had the idea about her that I didn't want her physically even if I did marry her."

He left for the States a week after this incident, resolved to return and marry the girl.   It was at this time that inexplicable feelings of deep depression settled over him   He felt that no one was interested in him   He was sorry he had left Capetown   He ruminated about his spendthrifty ways and his lack of economic and social security   Self-accusatory, self-pitying, and disparaging feelings filled his thoughts   There were frequent bouts of tearfulness. He felt that he was becoming shiftless   He fantasied "one mad dash, joining a suicide crew to get the Germans, Hitler " He had night-mares in which he talked about the "jerries, they are going to get us!" "I feel on edge, I want to jump out of windows—do anything."

BACKGROUND

Joe is the youngest of three brothers. They had been born in a Pennsylvania milltown of Hungarian immigrant stock The oldest brother, 35, is a foundry worker. Apparently he is a steady hardworking man who was always the "typical big brother" who defended Joe, and to whom Joe could turn for favors. The younger brother, 30, is characterized as being like Joe. "He is loud, looking for a good time " Also he is unhappily married and according to Joe wants "to get things out of his system," but is unable to do it the way Joe does, that is by going to sea.

His father always earned a good living He favored Joe and defended him against his mother, and seemed to understand his desire for traveling His mother, however, nagged and insisted on his settling down "She lectures me about saving money, and I get mad. I was my father's pet, the baby of the family. If I ever needed anything I didn't have to ask much—bicycles, new shoes—a pony while we were in the country. Yet I argue that mother spoiled me, gave me money when I asked for it, instead of slapping me down "

Joe never cared about school, and left at 16 before graduating. He was musical and played both the alto horn and the violin. He was easily swayed by his friends On leaving school he hitch-hiked to Texas because he had liked some Texans whom he had met by chance Then he knocked about the country for the next two years working as a bell-hop, usher, and waiter He tried farm work but gave it up for occupations which entailed personal service. At 18, a friend arranged a job for him on a ship where from the first he chose the steward's department, and never cared about engines Since going to sea, his habit has been to take long trips, save his money, and then "take it easy for a few months" before returning to sea

PSYCHOSEXUAL ATTITUDES

His first heterosexual experiences occurred soon after leaving home at 16. Apparently these were satisfactory He developed a personal code about women, which he summed up somewhat as follows: He did not like to pay women for their sexual services. He would rather buy them a half dozen pairs of stockings, take them out, talk to them, and in general have what he regarded as

an intelligent and acceptable evening He had a preference for glamorous, decorative women, usually having some connection with the theater, and he mentioned specifically a few dancers The various women he had known intimately over a period of years seemed to have in common the fact that they were financially independent, worked, earned their own livings, and were relatively strong, decisive characters. He liked to do things for women, to run errands for them, and to buy gifts for them He took pleasure in their clothing, and in turn liked to dress well when he was with them

He was frankly proud of his body and exercised regularly to develop his muscles and to keep himself slender and graceful He liked to be sun-burned and agile, and to give the impression of being virile and athletic

He spoke of himself as a "woman's man" and denied any interest in male homosexuality, except to say that homosexual men were "nice people " "You can get along with them, you can trust them " He felt that as a social group they were unjustly treated by society He admitted two homosexual experiences, both of them fellatio. The first occurred when he was 19 and down-and-out He was picked up by a man at a bar. The man was nice to him, bought him clothes, and gave him pocket money When he asked the patient to permit him to perform fellatio upon him, the patient felt obligated to submit He then decided that he didn't like this and told the man not to expect any more such favors The second experience occurred some years later, again when Joe was broke He was in a cafe in New Orleans, which was notorious for its "queer shows " There he "put the bum on" one of the performers, asking him for a quarter The performer said he would see Joe after the show He took Joe out, bought him clothes, and gave him some money Joe allowed him to perform fellatio upon him, and told this man too that he did not like this sort of sexual activity and that he would not permit it any more This did not seem to break up the friendship On his recent trip to Suez, Joe was struck by the fact that an attractive little boy of eight or nine seemed to tag along after him Joe was so pleased at this that he told one of his shipmates that the boy looked so cute that he "wouldn't mind getting into his pants "

Discussion

The war has brought many men into the Merchant Marine who would not otherwise have chosen this way of life The newer group is not homogeneous with those who sailed the seas before 1941 Joe is an old hand He had been at sea for ten years prior to the outbreak of the war, and he shares certain traits in common with many other "old timers"

It is characteristic of Joe, and of many of his mates, that there is no form of war service other than the Merchant Marine which he could perform His deep-seated and automatic resentment of spit and polish or any form of regimentation is so intense that he might break under the discipline of a training camp

In fact, along with so many of his shipmates, Joe had gone to sea because going to sea relieved him of a burden of wordless inner tension which became intolerable whenever he remained long on dry land He described this by saying, "I feel relieved when I make a trip I always decide not to go back to sea, but I always get restless and I have to It's getting there that's important" And in contrasting his life with that of his older brother, a truck driver, Joe said, "He is married, but not happily He wants to get things out of his system like me; but he can't like I do by going to sea"

This tension within him, which Joe had to discharge first by running away to Texas and then by his life at sea, bears the imprint of his ambivalent relationship to his parents, to his two older brothers, and to his young foster-sister. There was a close alliance between the four men in the family; and although Joe sought and accepted their favor and protection, he had constantly to get out from under. Joe's mother stood outside the circle of men, nagging and worrying and lecturing them, until Joe would have to get angry at her if only to prove that he was one of the men, no matter how deep was his secret attachment to his mother who petted and spoiled him "instead of slapping me down"

When Joe was twelve the family had adopted a little girl of five and Joe acknowledged that she always "appealed" to him more than "sisters would to other fellows," that he would come between her and other young men, and finally that he had become angry and "peeved" when she had eloped two years previously.

Out of this soil grew Joe's restlessness, his constant need to ingratiate himself with all men, his fixed over-eager smile, his too-ready acquiescence, his avoidance of all forms of independent aggressive work, his choice of jobs in which personal service was the predominant note, his eagerness to do favors, his over-attentiveness to clothes, his cultivation of his own bodily graces, his concern over society's treatment of homosexuals, and his incessant drive to get away from home and from a life on land

It is not surprising therefore that it was precisely this fragile web of neurotic adjustments, this compromise between marked hostility and false love and dependence towards all men, which should be the first of his adjustments to suffer under the impact of the war experience   The bombing attacks on the harbor at Suez meant to Joe that men, his friends, were turning on him and attacking him personally.   When his shipmates rushed off to seek safety without first safeguarding him, when British lorrie drivers went about their business indifferent to his fate, then for the first time in his life he felt as though he had been deserted, not only by father and brothers, but by all derivative paternal images as well. Consequently the first sign of his impending breakdown was the fact that irritability and anger erupted through his customary facade of eager friendliness   When on top of that he developed an abscess, then he finally "blows his top" with all the pent-up rage and resentments of a lifetime

At that point he is ordered from the ship by the captain, to enter a hospital at Capetown.   On emerging from the hospital he joins a woman who is different from any whom he had sought before. His previous women had all been girls picked up around the theater, non-feminine girls with a bit of glitter, or else dominant independent working women, whom he could talk to   This woman, on the other hand, mothered him   Hitherto he had never been able to accept a mothering woman: but danger and the sense of injury at the hands of men swept Joe into her arms   This marked a turning-point in his illness

He had never liked walking before; but now "I liked to walk, and watch people and flowers, and see what was going on around me."   He went to his room with her, and there occurred the emotional upset which was described above, in which he wept steadily for hours.   This intense upheaval was like a religious experience.

It was almost as though he had found his mother again "What is going to happen to me. I have been laughing at myself for my crying My girl comforted me and reassured me. She is the first woman I ever met whom I liked for reasons that aren't sexual. I had the idea about her that I didn't want her physically even if I did marry her . . I spent nine days with her I felt that I had someone in the world who was interested in me When I left I was serious. I felt lost without her But I didn't tell her I loved her I never told that to any woman But I promised that I would let her know no matter where I was if she wouldn't think that I loved her."

Then he left. He had to leave her, both for practical and unconscious psychological reasons. After he had left he slipped deeper into the depression in which he was when he was interviewed It was evident that, in his reaction from the bitter sense of betrayal by men, he had swung back to a childlike dependence on his mother, and that he wanted this "mother" to look after him always. Yet he could not rejoin her, because the price he had to pay for this was to give up his masculinity completely Therefore he could not tell her he loved her he could not marry her: he had to leave her, he could not return to her he could only mourn her

His days, therefore, were spent in a depression colored by mingled self-accusations and self-pity. His nights were spent in vivid nightmares of fighting and fleeing, of being pursued by "jerries" in planes At night he relived the betrayal at the hands of men; and through his waking hours he mourned his separation from the consoling mother figure whom he could not allow himself to rejoin.

Should Joe's illness be looked upon as a "traumatic" or war neurosis? Clearly it is not an acute combat reaction, to which any human being, no matter how strong, may succumb if the stress of battle is too prolonged and too cumulative On the contrary, we have tried to indicate that Joe was a most vulnerable human being He was vulnerable however only in certain specific ways. Had he been able to continue the compromises which he had worked out for himself, there is no reason to believe that he would have broken down He would then have been recognizable as one of a certain type the friendly servant, the perfect butler, the steward, the barber, etc. His stability was predicated upon the continuance of a life of service to men, and in a subsidiary way to

women, of transient relationships to women, and of a freedom to roam the world in safety. The war tore these compromises to shreds, exposing his buried hostility Men became his enemies, and drove him into a relationship with a maternal figure. This he could not sustain without feeling psychically castrated, with the result that he was precipitated into depression. We have tried to show how the bombs that were dropped in Suez disrupted the unconscious compromises on which Joe's stability depended

STRUCTURING THE COUNSELING RELATIONSHIP
A CASE REPORT

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T HE present paper attempts to analyze some of the factors that go into the structuring of a counseling relationship   The analysis is based on the complete recording of a successful opening interview   Briefly, counseling involves three related processes· (1) the release of feelings, (2) the growth of insights about unsatisfying conduct-patterns and goals as the feelings become clarified; (3) gradually the selection of more satisfying patterns and goals   But before these three processes can occur, a "definitely structured permissive relationship" must be established in which the client is able to accept the aid of the counselor in clarifying his feelings[1] The first step in counseling, therefore, is the structuring of this permissive relationship.

A confused person is likely to approach the first interview feeling a *minimum of responsibility* for himself and a *maximum of fear, insecurity,* and *defensiveness.*   Continued miscues on the part of the counselor in structuring the relationship seem to cause the client to begin to depend on the counselor, feel rejected and hostile if the counselor refuses to solve his problems, and finally in defensiveness and fear to flee the interviews and not keep subsequent appointments   The following excerpts from the case of "B" illustrate this sort of client reaction   At the beginning of the interview the counselor is not only defensively anxious not to answer any questions but he is wooden, cold, and unsympathetic, with little feeling for building up rapport.

(T—Counselor   C—Client)

T   You feel it important to win friends

C   Why, definitely I think it so   You know, I can win friends, but after that it's hard to talk to them   I'd like to know what to say, just what to do when I'm in a conversation with someone——   You are a student of psychology and should know all the answers

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[1] Rogers, Carl R   *Counseling and psychotherapy*   Boston Houghton Mifflin, 1942 P 18

T   In other words, you want a formula

C   (Laughing, breaks in on T) No, I realize it isn't that simple   There is no elixir—no formula that would help me   It's the idea that I want to get along with people and don't know how   Some people I can get along with all right

T   You find it easy to get along with some people

Already a certain tension has developed between the counselor and the client   As the interview proceeds this tension mounts. In the following excerpt from the same case near the end of the first interview the tension has produced hostility which seriously threatens rapport and the success of subsequent interviews.

T   You feel that earning a living is very important

C   I do   Particularly, if you want to have a family to keep and love (Pause)   If I could just carry on a good conversation with people, I'd get over a lot of my trouble   Right now I don't know what to say   You should know all about this, what do you think?

T   You would like for me to tell you just what to do

C   Yes   (Pause)   I'm waiting for your answer

T   You think that getting an answer would be enough

C   It might be   What do you think?

T   Hmmmmmm

C   If you know answers from several people, you can try them out   You only learn by experience

T   You think experience is best

C   That's true   The doctor may have several different types of medicine (seeming again to watch T catching up in his notes   )   You're certainly filling up several pages of notes aren't you?   What good does that really do? Do you ever really look back over them?

T   Yes   (Completely missing the feeling expressed)   If you're interested, we might look over some of these interviews later

By this time the client is determined to depend on the counselor and force the counselor to answer him   What was intended as the structuring of a nondirective relationship has become, because of the counselor's poor handling, an almost open struggle.   Even the counselor, as his note indicates, is confused

To avoid this kind of confused ending to what might have been a constructive interview, more understanding is necessary of the process whereby a successful counselor-client relationship is established.   The skill and effectiveness with which the counselor is able to set up this relationship in the first, or, at most, the first and second interviews, seem largely to determine the success of later interviews   Seen in this light, these initial structuring steps call for

Since the responsibility for making the appointment is with the client he feels the obligation to start the interview by expressing his problem   Ordinarily if the counselor says nothing after the polite introductory phrases are over, the client will begin to express himself   C-1 is a typical opening sentence of an insecure and fearful person. Notice here that another person is responsible for his making the interview   Thus, if he is made defensive, he can always say, "Well, I wouldn't have come at all on my own, I just came because the professor sent me," and politely close the interview. Typical, also, is the series of phrases in which the client avoids responsibility· First, he is dependent upon the professor for the interview; then, in C-2 he seeks to depend on the counselor, "Is it right to read those things?", then, his Granddad is responsible for his sex confusion (C-7); then, the professor, not the client himself, thinks he needs books (C-7)   Nowhere has the client directly involved himself

These opening responses illustrate one of the most intriguing aspects of this type of counseling. Apparently this student has completely solved his own problems and is merely seeking sex information. The counselor could have answered this request by explanation or books, the interview would have closed and the counseling been considered successful. Here, however, in T-1 the student is simply encouraged to express his feelings freely and the structuring of the relationship has begun   Had the counselor answered, "Yes, I can help you with that, I know a number of books you could read," he would have taken the responsibility away from the client and the interview would never have gotten beyond the question of sex instruction. That direct sex instruction is not necessarily the solution for the student is suggested in C-2   He already has received some information, but his problem is not solved   It is not difficult to surmise that, had the counselor spent the remainder of the interview in sex instruction and recommended books, they would have done the student little more good than the book he bought

The direct question at the end of C-2 presents a common problem in initial interviews. Obviously the student is quite insecure and dependent and wants some assurance from the counselor   Had the counselor given this assurance he would merely have opened the way for more dependency. Here the old adage, "Give him an

inch and he'll take a mile," aptly applies. The question is not answered, however, and the student is simply encouraged to continue to express himself, which leaves him still with the total responsibility of his problem   This response obviously struck the student as somewhat strange and he still must have some answer   This feeling of strangeness is one of the first steps toward a therapy relationship   His questions are not simply going to be answered, books are not going to be supplied him at his will   Vaguely he begins to feel that he cannot depend on the counselor as he has always depended on others.   He insists on an answer, however, and the counselor, so as not to break rapport, agrees to accept the book. He could have taken the responsibility away from the client, first by glancing through the book since then he would have been forced to give his opinion immediately, or by assuring the student that he would read it and give his judgment at the next interview   The counselor however, agreeing to accept the book, makes no statement about passing judgment, and the responsibility is still with the student.   After the book has been placed on the desk, the interview is back where it started   The student still has the responsibility of explaining his problem, and the little sidetrack which might very readily have caught an unwary counselor and created a difficult situation of dependency has actually given the student his first taste of what will be for him a unique and ultimately very successful experience

In C-5 the client begins again to express his problem as a sexual one.   The pause allows the counselor to begin verbally to structure the relationship.   No clear-cut rule can be given at exactly what part of the interview this verbal expression of the relationship ought to be given, but two extremes should be avoided   This verbalization of the relationship ought to flow naturally from the context It is better here, for example, than T-3   The student wanted the counselor at least to read the book, and to have refused to do so, and bluntly structured the relationship, would undoubtedly have made the student feel rejected.   This is what happened in the interview of "B," previously cited.

The second extreme to be avoided in verbalizing the relationship is to put it off so long that the client leaves the interviews without any clear notion of what is expected of him   If the counselor refuses to solve his problems, the client must be given in the first interview—if he is to return—some notion of the value this counsel-

ing relationship will have for him   In C–7 the student now obviously understands that he is free to release his feelings and he does so with what might be called real enthusiasm

The interview continues:

C-8   Yes, that's what I mean (pause) Uh—I used to always believe it was sinful—sexual reproduction, uh, and all that sorta thing, and I just steered clear of thinking on it, uh, thinking it was sinful to even wonder about such things   But, I guess, from what was explained, as long as it's done the proper way in marriage, it is no sin (pause) Well, am I beginning to explain anything to you that you can see light at all on my problem, or— (pause)

T-8   You feel that it is so, ah, I mean—that you have explained how your—own feelings are?

C-9   Well, here's something else that bothers me—this question, uh—I have been awfully, uh—uh, in the dark about—I mean, uh, I never did go out with girls at all in high school, so I'm not very well acquainted with their ways and tactics   But, I have been getting so lately I'm even afraid for fear I take too long to stare at a young lady, uh, and I don't know just what to do on the matter   I mean—uh—is it sinful to admire a girl—uh—I've seen a lot of boys glare at pictures of movie stars—that's rather foolish, but—if I get that part cleared up, I will feel as though I got something up out of my system

T-9   You feel you do have quite a struggle even thinking about these things

C-10   Well, it was daydreaming   I used to like to daydream about being a cowboy and everything and wearing boots and all that childish sorta thing   That used to give me quite a thrill, but no one ever told me until one day I happened to hear it in a class, and I thought, maybe there is something to this and I shouldn't carry on that way

The counselor's responses in T–7, T–8, and T–9 verbalize the feelings he has expressed and encourage the release. With this release of dammed-up emotional confusion, the therapy process has already begun   Whatever the reasons are, it seems that an emotionally confused person can gain no real insight into himself and can make no steps toward solving his problem until he has repeated opportunities to verbalize his emotions and conflicts. Once the client realizes he is allowed to talk freely and will be listened to sympathetically, he literally jumps at the chance. As far as can be known now, it seems unwise to interrupt the flow of this release. When the client pauses for want of breath, or to regain composure, the counselor should not quickly respond, but, after a pause, quietly clarify feelings expressed, and the client, in the first interviews needing more releases, will quickly take up where he left off.

The very small verbal part the counselor plays in this release

might mislead him into thinking that he is not doing enough for the client This would be a grave mistake The counselor can do nothing more productive of therapy in the early interviews than to sit quietly and listen with sympathy and interest during these long releases The more difficult the counseling case, the more necessary release appears to be The counselor may begin to grow weary during these long releases which appear each time to go over the same ground and feel the interviews are getting nowhere Nothing could be farther from the truth Careful analysis of phonographic recordings of many interviews show definite progress often follows soon after these releases All the reasons why this release is so essential are not known, but it appears to be a pre-requisite for most insight and growth through counseling If he receives this release and is not made defensive or insecure, the client will be more than satisfied with the first interview, and will very willingly want to return

It can be noted that by the end of this release the problems of social maladjustment and daydreaming have also been suggested by the client These problems come from himself—they are a real and disturbing part of his life He is not merely stating them because someone suggested it (as, for example, need for sex information, coming for the interview, etc) and, left to himself, he states his problems with an intimacy of detail which directive questioning would never have secured This illustrates the often observed fact that, even when the purpose of the interview is diagnostic, more favorable information is secured by allowing the person free releases than by too many questions which only make him defensive and silent

The interview continues:

T-10   It is true, isn't it, the effort forces us to clear our own viewpoint In being forced to be clear we see our own feelings clearer

C-11   You mean I try to express my thought to you, and it becomes clearer to me

T-11. Yes—

C-12   I don't know just where to pick these thoughts up (pause)

T-12   Just go ahead—express yourself freely just the way you feel

T-10 would probably not have been necessary, but it is a restate-ment of the counseling relationship which the client accepts in C-11. The client now begins to see what his role is going to be in this relationship He sees that the release is not only satisfying

to him but also fits into the relationship and he begins again will-
ingly to pour forth conflicts and confusions that have been
developing for years.

The interview continues

C-13   Well, one thing, when I used to be in high school, I was very meticulous—
and stay by myself and everything else, and never even had, as I was trying
to tell you, any knowledge of these things   I mean I was staying behind
while other boys were getting out and mixing and getting in sports and
going to dances and things and learning the proper attitude to take care
of girls and go out with them   I just didn't do that sorta thing and with
the result now I am due to have an uneasy feeling even going to a dance
or anything and getting out with a girl   As a matter of fact I never even
have been on a private date, except for a high-school prom or dance or
anything like that   And now when I come up here to F   and stay by
myself and probably other boys thought it was queer, why—uh—then
things begin to dawn on me, that idea that something was terribly the
matter with me and everything else like that   I took it up with G   and
asked him if I ought to see a psychiatrist, and he told me from the things
he had heard he believed that the best thing for me to do was to get a
proper knowledge of these matters that are bothering me and so forth like
that   Anyway, when I came up here to college—uh—I always had an
awfully hard time in high school getting my lessons like other kids—I
mean, uh—in particular, the fourth year—uh—things got pretty bad and I
used to have a terrible hard time putting my mind to my books   I just
thought it was natural and other boys had the same struggle, and it would
take me maybe two hours to read a chapter or something in history that—
uh—what other fellows would get done in a half hour, or something like
that   And then when I got up here to F   , I just realized that that sorta
thing—there was just something radically the matter that I would carry on
that way, and I have been trying to get out and mix more and be more
friendly in general and become a little more normal the—in the way I carry
on with others   I have been trying to break myself of some of these things
Staying by myself and everything has affected me, and—uh—now it's
getting a little bit better, as, well, I mean, at times I find it very easy to study
and get my work and other times it becomes so hard I get so discouraged
I don't even try to study (pause)

T-13   Yes, you feel it isn't just a need of sex information—but, there are
other aspects in it too which seem to all fit together, eh?

Reading through all the release in C-13 one gets the impression
of a dam bursting   Here for the first time this withdrawn, con-
fused, very sensitive student has an opportunity to tell someone
who appears understanding all the agony and fear that the "idea
that something was terribly the matter with me" was causing him
He knows he is desperately in need of help   Certainly the prob-
lems which are the result of a whole life pattern of withdrawal
are not going to be solved by sex information.   One can see now

how obviously erroneous it would have been for the counselor to have taken the boy's introductory statements as being real self-understanding   True, he does need sex information, but his sexual confusion is only a very small aspect of a whole syndrome of confusion, withdrawal, anxieties, and social maladjustment   Here at least, and probably in many other cases too, sex confusion is only one of the *effects* of a personality disorder

We can notice here also how ineffective for this student would have been that type of college counseling which deals only with study problems. Just as the solution is not merely sex information, so it is also far beyond the need merely of intelligence and aptitude tests, information about his reading speed and faulty study habits. Diagnostically this student does need assurance that he has sufficient intelligence to do college work and he has obviously poor study habits and inability to concentrate.   But even careful correction of the student's study habits, if this were possible in face of the personality confusion, would have left him ultimately little better off as a result of the counseling experience.   A counseling process, however, that is so structured that it allows the student to take up whatever problems he feels most in the need of discussing, will probably go much farther in the long run toward solving purely scholastic difficulties even though they may be seldom mentioned in the interviews, if mentioned at all   In the same way, other forms of guidance, as in child clinics, for example, if, rather than aiming at giving only diagnostic information to parents and agencies, they broadened their counseling, a much more complete service with more enduring results might be rendered for the time and money spent [3]

In T–13 the counselor makes what might be called a "forking" response. He accepts the client's feeling that his problems go beyond sex difficulties, and the relationship has now been broadened so that the client feels he is free to continue discussing all these other confusions   This kind of double-pronged response after releases of this sort seems to be an essential part of the structuring process   The client goes only very gradually into the deeper problems that are troubling him, the counselor must in response indicate to him that the relationship is not limited to any particular type of problem   Thus, students will come to discuss a class dif-

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[3] Rogers, Carl R   Therapy in guidance clinics   This JOURNAL, 1943, 38, 284–289.

ficulty, and as the interview continues begin to indicate other problems. The fact that he has these other problems is usually only cautiously suggested by the student. If the counselor is insensitive to these suggestions of deeper need, the student, after one or two attempts, will feel bound merely to discuss scholastic difficulties If, however, the counselor recognizes the student's suggestions of deeper need, the counseling relationship will go far beyond what was originally intended.

The interview continues:

C-14   Uh hum, well, that is it—it isn't a teacher's work to take care of social functions At lease, the sexual may—when I get that straightened out, I can take care of some of the other things (pause)

T-14   You feel that to some extent you have been—things have been getting better for you—uh—things are improving somewhat

C-15   Uh—I think they are (pause)

T-15   Would you care to speak of that?

C-16   Well—I'll tell you, when I first started to school here during Freshman Week, I made a trip to my hometown and saw a boy who had been my special friend, I found out how much better he was progressing than I was and getting out and mixing and getting along fine in school work and everything and I just had a terrible feeling of inferiority in comparison to my friend A little bit later I began to get in school (X) work and on the first and second day of school things just snapped back in the old way of feeling kinda down and blue and feeling timid about speaking with others and it's been going on that way I will get a spell where I will feel very good and maybe wanta get out and mix and be sociable and begin taking more interest in sports and the like—in general like that, and I find if I get by myself any length of time I just snap back to what I used to be (long pause)

T-16   You feel activity does—social activity or getting out among others—does help to straighten things up for you—I mean—

C-17   Well, when I do get out, I really get my mind off myself and into the group, for instance, I do find that I begin to build up again and the things that worry me vanish and I feel much the same as anyone else must feel (long pause)

T-17   Would you care to develop your feeling,—I mean—just how do you feel—in that way, or—

C-18   Well—here's something else that probably—uh, for one thing at times I seem to have a conflict within myself—uh, last night—well, I will start this way I will decide within myself I am not very much of a man, and have everything all figured out what I should do—I decide I should get out and mix and start in, and start over and develop myself a little bit the way I should, and then I will run up against some discussion in psychology class,

(A)   or, uh, like it was mentioned that some people have conflicts and they are not responsible for the way they are acting and they need help from others And then I start wondering maybe I should take it up with someone and

(B) have them settle it   Uh—I seem to have a constant swaying of opinion along that line in different things   Wondering just where I stand and what I should do   It seems perfectly evident at times that I should, uh, well, this is one reason that it's bothering me—it seems very, very certain in one way that my decisions are right, and then at other times I don't know whether the devil got me or whether there is something to it   For instance, feeling good like   I don't know whether that's temptation or what— wondering that really all youth do go around feeling so good all the time as I feel when I really get out and really live and get my mind off myself I wonder if that is the right way or is that expecting too much from life— a really perfectly, gloriously feeling within you and just a desire to get out and do as much as you possibly can   I wonder is that the right spirit of living that I have had or is that expecting too much of life to be as perfect as that   Uh,—and things such as that—(pause) I do believe though as I was trying to tell you, I think things are at least a little better than they were   (pause)   Sometimes it was lack of application and things like that   Another thing is it wouldn't bother me so much later   (X) At times I like to think myself a problem and other times I want to get away from it   I like to think I do really have something the matter with me   But then I think if I use a little bit of will power I'll get over these things   Then another time I think I have problems that I should take up with someone   It seems very hard at times   Right now I am more or less feeling it is lack of spunk and manhood to go out and to do what is right   (pause)

T–14 refers back to the client's release in C–13, "Now, it's getting a little bit better, as, well, I mean, at times I find it very easy to study and get my work " One of the unsolved problems of this kind of counseling is how to handle a long release like C–13 Quite a number of feelings were expressed there Should one try to respond to all the feelings expressed, or do as this counselor did in T–13, pick out one fundamental feeling? He wanted to give adequate recognition to the client's release of the problem being more than a sexual one. The counselor wanted also, however, to recognize the positive feelings expressed at the end of C–13, since it seems very valuable for a discouraged client to have even very small positive steps recognized and clarified But neither T–13 nor T–14 were at all adequate recognition of the student's social maladjustment, his shyness with girls, his feeling that he needed help, his recognition of his inferiority in comparison to others, and his realization that staying by himself had definitely affected him. Probably the terseness of C–15 is due to this inadequate recognition on the part of the counselor of all the feelings expressed in C–13 and C–14. In T–15 the counselor, probably not too clearly remembering all the release of C–13, now encourages the client to further release

An even better response probably would have been to summarize further all the feelings expressed in C–13 One might, however, argue in defense of T–15 that, in opening interviews when the need of release is so great, too long counselor responses might do more harm for the client in blocking needed release than the insights gained by them would be worth

C–16 is a repetition with more details of the inferiority feelings expressed in C–13 This illustrates the interesting point which seems to be almost always verified, that the client will tend to repeat feelings that have not been adequately recognized by the counselor.

T–17 was a poor response The therapist failed completely to clarify the insight expressed by the client This, however, was not so serious because in T–16 the client's feelings were accepted As a result, the release of C–18 is a much deeper statement of the student's confusion This is a clear presentation of the ambivalence that is always in the client's mind during the opening interview Fearful, insecure, and not sure what the counseling relationship holds for him he reassures himself that his problem is not serious On the other hand, the pressures of his maladjustments are so great that he cannot help but admit at times that his problem is very serious, and in this mood he takes the responsibility of asking to see the counselor. In C–18B the indecision and inability to place any confidence in his own judgments which characterize the whole life pattern of the client also affect his view on his own problem At times he is not sure if he should try to settle the problem him-self—in this mood he wants to "Take it up with someone and have them settle it," to be entirely dependent on them Even after he has come for help he is not just too sure that it is serious He could easily convince himself (and he would do so very quickly if the counselor made him defensive) that he is just like everyone else and consequently has no need of counseling He reassures himself that things are a little better He then makes a clear-cut statement of his ambivalence, "At times I like to think myself a problem and at other times I want to get away from it."

The interview continues:

T–18   Right now you feel pretty low
C–19   Well, not so much so—it seems rather silly, but now that I think I have found the way to real happiness, I wonder if it is the right way. Then I think I shouldn't give in to these temptations And I shouldn't have these

worries about what is the natural way to feel, so it is rather confusing to know just where the stand on things is

T-19   You're kind of pleased at the thought that this may work things out for you and yet—or that in this interview you can work things out for yourself—that is, talking to someone—and yet you feel some way or other you're a little afraid to be too happy

C-20   I don't know   Sometimes I feel I should give myself a good kick and I want to try to get just as good as I can from my courses   And I realize how foolishly I have been carrying on and start right in and do things And really down inside me, it must be stupidity or something —Wondering if it is possible that people are happy all the time (pause)   I know back in high school—I never did get very well acquainted with the kids   I was afraid to tell them I loved to go to bed at night and dream of being a cowboy and dressing all up   I wouldn't tell it to anybody   I never really did think what I would do later   I thought it was so wonderful to go to bed and dream   It wasn't really until last June about graduation time that I began to think maybe there is something wrong connected with it And then I used to want to do manly things —My grandparents never seemed to think anything about it, and at Christmas I know I wanted to get a pair of those high boots and I used to speak about getting them and the folks never got them for me   Maybe all those things carried over into high school (pause)

T-20   You feel quite a number of things—manly things—that you wanted to have in your childhood were somewhat denied you, unknowingly, on your grandparents' part

C-21   Well, I don't know how to say that. If I were to say that to you, you'll begin thinking I'm rather ungrateful to speak that way of my grandparents (pause)   They've been as good to us, in many ways, as real parents could be

T-21   You feel that what you would say to me—would give me the wrong impression of your grandparents

C-22   I wasn't going to really tell you all these things   Sometimes I think my granddad's awful stern   Then at other times I think he isn't so bad and I should be more respectful to him in spite of the things I don't like about him, and such things (pause)

T-22   Would you care to speak of your feelings in that way—not to be worried about what you say   I'm not passing judgment—just speak out if you wish Feel free now just to express your feelings.

C-23   I feel miserable while I'm talking, wondering what you think and what I should be saying   But in general I might say I don't have any set attitudes

(A)   I have more or less confusion—I think I've come to a general decision on what I think is right, then I'm constantly shifting my opinions and I get so disgusted with myself   Another thing, this is a little off the way, this morning I began to get bolstered up within myself and decided to make something of myself, to do some work and all the time I was trying to read a poem and develop a real interest in trying to get something out of it There were two things in my mind—I was trying to learn the poem and I knew I couldn't by thinking—I just couldn't seem to get into it   I thought

(B)   I was beginning to see light ahead on some of these things   I don't know whether I will be able to work things out myself or whether this will be

helpful to me   But that is another thing about my grandparents. I have always been pretty respectful to them, and lately I began to wonder if they
(C) wouldn't be able to help me   I tried to talk to my grandmother, but she didn't seem to think much of it   For instance, my granddad is out driving and someone passes him or something—he always hollers about what terrible drivers there are on the road—how people are all crazy nowadays
(D) and things like that—uh—is this of any value to you?—I mean—the things I say?
T–23   It is worthwhile to speak freely, isn't it?

T–18 is obviously an extremely poor response to the ambivalence expressed in C–18. The client would have gained much more insight and probably moved along quite a bit faster in the interview if the ambivalence within himself had been clearly recognized by the counselor   T–19 was probably not what the client expressed in C–19 either. But here the relationship has been structured enough and the client's need for release is so great that it does not seriously hurt rapport, and the client pours out for the first time his compensation for childhood failures in daydreams. The high-top boots symbolized the comradeship with other boys in rough games that he always wanted but never had the courage to achieve

The counselor in T–20 rather than responding to the last part of the release could have responded to the confusion about daydreams and the desire for comradeship   Here again the problem is presented of what to do with long responses including a number of feelings   Usually, because it is probably clearest in the memory, the counselor tends to respond to the feelings last expressed. Another way these long client releases might be handled would be for the counselor to break in and clarify each feeling as it is expressed. Much more research on this fundamental point is necessary. The problem goes to the very core of the dynamics of therapy   Is the release, at least in initial interviews, more fundamental than insights, or would adequate counselor responses to each feeling of a long release remove the need for further release? This question of the degree of release necessary is a very practical impediment in the way of the wider use of counseling by workers in agency and guidance centers   Time limitations, small personnel, restricted budget, and the inability of most clients to pay large fees all place restrictions on the extent to which therapeutic counseling can be used. Since client releases take up so much counseling time, the advantages of counseling could be extended much further

if the process could be shortened by limiting the client's need for release Thus far however, since the client's need for release seems so great, it has been considered unwise for the counselor to try to break in

Client expression of guilt feelings, as in C–21, is quite common in opening interviews Uncertain how the counselor will accept this hostility against his grandfather, he becomes self-conscious and confused T–21 is a further step in the structuring of the relationship. The guilt feelings are recognized and the client continues his hostility in C–22 with still some self-consciousness T–22 is another step in the structuring process The client now realizes that this relationship includes more than release of feelings and confusions within himself He now feels free to express, if he wishes, hostility with regard to others.

The effectiveness of the two counselor responses, T–21 and T–22, is verified by the long client release that follows The beginning of C–23 is a good example of the self-consciousness and desire to say the right thing with which an insecure client approaches the counselor This attitude is a carry-over from his other social relationships—being dependent and fearful of rejection, he always tries to say the thing he thinks other people expect him to say. C–23A, however, shows that this inability to form his own opinions is a source of unhappiness and makes the client disgusted with himself In C–23B there still seems to be some reluctance to seek help in working out his problem. In C–23C, the counselor's structuring has been accepted and the client begins to pour forth deep hostilities to things his grandfather does which he has kept pent up in himself for years But he is still a little unsure of the relationship, still a little fearful that he may be saying the wrong thing, and in C–23D he wants assurance from the counselor that he will not be rejected for the release of this hostility.

Taken as a unit, C–23 is a good illustration of a new step in the structuring process whereby a self-conscious, insecure client, who wants to release hostility and at the same time is afraid to do so, is aided- to feel free to pour out that hostility without any fear of rejection or criticism on the part of the counselor It is not enough that the client only feels free to express socially approved feelings. He must also be allowed the opportunity, when he desires it, of expressing hostile, socially unapproved, and negative feelings. Only by speaking out these pent-up emotions is the client able to

see them and ultimately to judge them objectively   Unless he can
do this in the counseling relationship, a very effective part of the
therapy process will be barred to him and he will leave the inter-
views with many emotional confusions and smothered hostilities
that he has never been permitted to work out   Interesting to note,
negative feelings completely released seem eventually to give rise to
positive ones   Later in the interviews this student sees his granddad
in a much more favorable light

The interview continues

C-24   I think often that after the war things will be so terrible, education will
just be gone like it was in the days after the fall of the Roman Empire, and,
well, uh—some other—uh—(pause)   One thing that was very outstand-
ing—I mean—uh, for instance, suppose in a new situation, rather than
noticing or observing the surroundings and observing the people—suppose
in between class out at the—uh, it's very—seldom, uh, that I notice the
people walking along, uh, and notice the different buildings and just notice
what others are doing and like that   I just naturally pull myself inward
and at times, I find, well, I think I know the answer to the problem and
I think I don't   I mean, uh—and try to decide what I am going to do
about things   Well, uh—I decided I'm going to try to meet someone—a

(A)   friend   I just go along and try to talk to myself rather than act   And in
class for instance I find it very hard to keep my mind on the instructions,
as I was saying before, and uh—things in general like that, uh—a general
feeling of confusion, but that's at times   At other times I can enter into
things and feel very high spirited and—uh—really want to develop and
because I am so happy within myself I realize that that is the normal way
and just change my whole life—I can realize how really wonderful things
can be and how many things can be accomplished with just a little effort
and how easy it is to make something of one's self   And, uh—later on,
uh—these thoughts will vanish   It really seems like there was something
actually taking hold of me—right back to feeling down (pause) I notice
especially of days if there aren't classes or anything and if I'm not busy and
if I'm home by myself maybe doing some work, if I'm not very much
occupied in that way at times I get a feeling—it must be just idleness or
temptation, uh—I'm just all jitters inside me—an awfully upset feeling at

(B)   times like that   At other times I find it very different   I have been told
before to get your mind on something and interest yourself   But at times
like that or other times I find it very difficult to keep—I mean—to get my
mind down on things   It is easy enough for me to say that sorta of thing,
but for instance if I get a little courage and ambition and get down to
things I love constantly to, I mean, it comes naturally—I don't do it on
purpose, to get my mind off my books, and uh, start telling myself what
I should be doing and I am going to study, and uh, I must do this and I
can get it done and everything like that   But it's very unnatural for me
just to take a very good interest in things (pause) Well, another thing I
find it very hard to express myself to a friend in language, uh, that suits
my age   I don't think it is in language, the instructor wrote on one of my

pages—criticized the way I expressed myself—confused thought   The
trouble with me is, I don't get out the way others do and—uh—I   (X)
probably waste a lot of talents I do have carrying on like this, and I see
where I stand and things are very unstable with me   I mean, I will go
on for awhile and things are very much up in the air and then I will if I,
at least it has been this way,—maybe I am gradually getting into a different
(C) philosophy on life where I won't have these ups and downs   But nothing
seems to be very certain with me   I know, uh, during the last quarter of
school things—began to be very happy for me for awhile I began to get out
and mix with others, and, gee, this is the way to be, I mean to get out and
mix and to talk and be happy for a few days and start planning what I
was going to do and I wasn't any different from anyone else, and if I really
tried to develop myself and get interested in dancing or something I could
do the same as they   I always used to feel if I wasn't good at dancing or
any sports or anything like that, it was because I didn't have any talent
within me—I just couldn't develop no matter how hard I tried   During
these periods of feeling good—uh, as I call them, I'd get all bolstered up
and feel I was no different than anyone else—get out and mix and make
something of myself, but a few days later get down in the dumps, as I
call them   And—the whole thing would just cloud up again   It seemed
whenever I even talked with anybody, I, uh—have a very hard time—at
least if I'm down at that time—to really get myself interested in what I'm
saying to them and really concentrate on what they are telling me   I'm
constantly being confused, distracted from what they are saying and it's
quite a problem to even concentrate on what they are saying, so—it's easier
(D) just to drift off (pause) I know now, on looking back, things always have
been that way for me   In class, for instance,—a lecture, I just constantly
drift and drift and, uh, it's very easy for me to daydream in anything like
that   In school work, it's very easy for me to daydream and just com-
pletely drift—uh—uh, off from what the instructor is saying   It is espe-
cially hard when I'm talking to anyone individually like I am with you
now   I notice when I try to get out and mix with people and carry on a
conversation and it is extremely difficult to try to keep up a conversation
and carry on more sensible answers than just yes or no   And I find it hard
(E) to put forth sensible arguments without—uh—being distracted and being
confused and being self-conscious—and—what do you think of situations
like that? (pause)
T–24 You feel—quite inferior to others at times—At other times you feel you
can mix normally with them and—yet there are times when you feel—quite
out of place

In C–24A, the seriousness of the student's problem in his swing
from elation to deep depression is vividly pictured   In C–24B,
being told what to do is not enough, it does not solve his difficulty
in keeping his mind "down on things."   This state is so miserable
that he is grasping for anything that will give him a "different
philosophy on life" where he will not have "these ups and downs "
In C–24C, the student shows some little insight into his social mal-

adjustment and he actually is trying to overcome this, but the very nature of his confusion makes it almost impossible for him to talk with anyone, since he cannot concentrate and be interested in what they say. Much as he wants to become socially adjusted, mix with others, and take part in sports, his maladjustment and mental confusions defeat his best efforts. Even though he has been told repeatedly by others and as he accepts somewhat himself, "getting out and mixing with others" is part of the solution, he cannot do this in his present state of self-consciousness, insecurity, and confusion That is to say he has made an effort to carry on conversations with others and mix socially, but because of deeper difficulties within himself, he cannot even concentrate on what is being said. As he says, "I find it hard to put forth sensible arguments without being distracted, confused, and self-conscious." Concentration is so difficult for him now and he is so confused that as he says in C–24D, "It's easier just to drift off." Such expression as this about the ease of drifting off makes one question just how much more pressure would be necessary to cause this student to give up the struggle for concentration entirely and make a total withdrawal from reality.

C–24E is a common ending to a long release The client, a little bit surprised at pouring forth so much, often ends with a question in order to cover up his self-consciousness and at the same time get some reassurance that he is doing the right thing

T–24 was obviously not a complete response to all the feelings released by the client. It does, however, sufficiently express the client's ambivalence to social situations so that the client is able to continue his release The counselor might readily have been caught off guard by the direct question at the end, and he might have seriously sidetracked the interview by giving his opinion He did not, however, and the client continues to go deeper into his confusions. If there is a real response to the client's feelings, he rarely notices his direct question going unanswered. When a client asks questions like this, he does not seem to want an answer, but is only reverting to the old pattern of shifting responsibility over to the counselor When the client really wants an answer, he will invariably repeat the question, as he does in the beginning of the interview (see C–2, C–3 and C–4).

The interview continues:

C-25   Well, yes, I would say that it is   Especially so if I'm in a tussle with
       someone over at the gym, I would probably feel very much—uh—inferior to
       them   Uh—and I have always been trying to avoid that sorta of thing   I
       mean in high school rather than get into a fight over something I thought
       was right, I would try to talk to them about it or else avoid it completely,
       rather than really stick up for myself and even get in a fist fight or   (X)
       something and really get things straightened out (pause) My granddad's
       always talking now about the world situation   But, he has a very different
       slant on it, it seems, at least, from what I hear up at F   He discussed
       the war issues and says it's just a money-making scheme   And you hear
       others say we are fighting to save democracy, and it's just a clash,
       and—(pause)

T-25   Yes—you feel there are a lot of other things—at home that are a source of
       confusion now, I mean—

C-26   Yes—there are an awful lot of things bothering us   At times I think if
       I ever get my own self straightened out I could help everyone else get their
       problems straightened out, too—maybe it isn't such a hard matter   I know
       my younger brother, M   , I know, at least from what I observe, I don't
       see how he can be doing very well at school—his report cards are terrible
       And, uh, it's probably my brother's fault—but it's my fault too   I'm not
       helping him along   I know he just goes to school and takes no interest at
       all because he never does his home work   I sometimes wonder if it isn't
       something in him and he doesn't know just what it is that is causing
       him to be disinterested in school work   He seems to be behind the
       others (pause) —And—uh—yet, like here tonight I'm talking these things
       over with you and when I go home I just wonder what an absolute fool
       I was to bring up such petty things (pause)

T-26   You feel I will—think they are more or less petty—I mean, I won't take
       them very seriously

C-27   Uh—well, I don't know just how to settle that question—for one thing,
       even talking here tonight I find it very hard to do any deep thinking—I
       mean—uh, what I have been saying to you has been more or less on the
       surface   There really hasn't been any deep analysis (pause)

T-27   These problems are serious for you, though, aren't they? —No matter how
       light—or how serious—others might judge them?

C-28   At times I think they are very serious—but as I tried to bring out especially
       when I hear anyone talking on a situation such as psychologists do nowa-
       days that society is so involved and everything, then I think it is very
       possible that I have such a condition that needs help   Then later on, when
       I seem to be feeling normal—well, all I need to do is get out and I can
       settle this whole thing myself   At times they seem serious to me and other
       times rather petty   I think on the whole though, many of these things,
       if I were to ponder on them at all, I would think of them as quite
       ‸ serious (pause)

T-28   Yes, you feel—at least here and now they are serious for you   You do feel
       though that there ought to be a way that you could work them out with
       someone—perhaps—but where you in the end may be able to stand on
       your own feet. That is—you wouldn't want to be dependent on others all
       the time for solving your problems, eh?

C-29.   No, I wouldn't want that—I don't know what's the matter with me   (X)

It's just been—either I have never gotten wise to myself before or life isn't what I expect of it—During Freshman Week and later on, it seemed so wonderful and that's why I can hardly believe it's true   I have been in a fog for about 19 years   Or maybe I'm expecting too much (pause)

T-29   You're not—sure about that—

C-30   No, I think probably it's just my total lack of manhood that I'm unable to put my foot down   Sometimes I think I can take care of things, and other times it becomes very disgusting to me to have the thought come to me that this can't be the right way of life, to be so happy to want to go out and get at your lessons and if it were only this way all the time it could be such a heaven

T–25 is another broadening or forking response which allows further consideration of the home situation in C–26 particularly the younger brother's similar confusion.   C–26 ends with the same note of self-consciousness as C–24   T–26 and T–27 respond to the client's ambivalence about the seriousness of his problem.   Taken by itself, T–27 was not a very good response but could be justified as a response to what had been expressed previously by the client. C–28 is a restatement of this ambivalence of the client, with the final acceptance that his problems are serious

The evolution in the client's own thinking about his problem from the beginning of the interview is as follows:

I   Needs information only
II   Problem is wider
III   Ambivalence $\begin{cases} \text{Problem is serious} \\ \text{Everyone like himself} \end{cases}$
IV   Accepts problem as serious

With the client's acceptance of the seriousness of his problem, a further step in the structuring process was fittingly taken by the counselor.   In accepting the client's feeling that when he is normal, "All I need to do is get out and I can settle this whole thing myself," the counselor attempts to make it clear that this relationship will not take away his normal desire to settle the thing himself.   That is to say, there seems to be a healthy aspect in much of a client's resistance to counseling.   Insofar as he sees counseling as a situation where he is to give up his own independence and place himself entirely in another's hands, then it would certainly be healthy to resist this kind of dependency.   For the counselor to try to break down this resistance would injure and perhaps destroy one of the client's greatest potentialities for normal adjustment   T–28, then, prepares the way for the final structuring of the relationship by

accepting and not resisting the client's desire of both independence and the ultimate ability to solve his own problems This allows the client to express, in C–28, that he does not want to be totally dependent. Probably much of any client's defensiveness in the initial interview may be attributed to this fear that whatever remaining independence of judgment he still has may be taken from him by the counselor. What Rank calls the client's negative will, which seems largely to be a healthy defense of his remaining urge to independence, should not therefore be resisted or destroyed, but rather accepted and utilized as the client's most powerful means for therapy. Thus, counselor responses which try to break down the client's resistance appear to impede rather than further adjustment

The interview continues:

T–30   Yes, it's about four minutes till the hour We will have to call it off in about two or three minutes— You do feel quite confused and yet you have had some glimpses of a feeling of happiness —That is really what you want, isn't it?

C–31.   I want that but I feel as though I shouldn't go after it I feel, uh, at times as though I could be another Franklin Roosevelt—or something at times But—I don't know whether to go after that or not I like that and yet, it just antagonizes me to know that I can't have it —And yet I don't know whether to go after it or not at times (pause)

T–31   Yes—

C–32   And if I do go after it, I usually wind up in a mental mess anyway, uh, I mean, two or three different times—it comes on me when I don't expect it (pause)

T–32.   One of the surest ways there is for us to retain our independence—you know to solve our own problems, which is what everyone wants, that is to talk them over with someone in a situation like this—who will help us, but at the same time will not just take over our lives for us That's what you feel, I believe—isn't it? That someone will just tell you what to do without giving you any chance to work things out for yourself

C–33   Uh, I'll try to explain what I think you mean You mean someone, I'm afraid will just—is just gonna say, this is the way to do it, and go out and do it, and for heaven's sake do the way I tell you and that's the end of it, be a man—uh, well, that's the way I have thought of things (pause)

T–33   Yes, you don't want that—do you?

C–34.   Uh, I'd like to have—uh—I really wouldn't like it I'd rather—I'd like to have something I could lay on—I mean, a foundation, for one thing (pause)

T–34.   Yes—well, that's what can happen here—I mean—this is for you—these interviews, and I won't try to take over your life and tell you what to do— but it does help, doesn't it, just to talk things out. It helps you to talk with someone, eh, and in talking things do come out a little bit, don't they?—I mean, at least our problems become clearer.

C-35   I think so

T-35   Yes—well, that's the situation and I think much can come out of it but you will be doing it—I will be here to help—

C-36   But maybe the things I say won't be important and I'll be wasting time

T-36   Just say whatever you please I want you to feel free I want you to come and you are not wasting my time at all I want you to come because I would be glad to have you, and I feel it is worthwhile, but that doesn't mean that I'm going to try to take over your life

C-37   Well, I would like to come back

T-37   Yes—the same time?

C-38   If it is all right with you

T-38   Yes—and it is your hour and you feel perfectly free and you will be working out your own problem

C-39   You don't believe in working a person's life out for them Should I just talk about these things that bother me?

T-39   You want to work out your own problems, don't you?

C-40   The main thing is to get them settled

T-40.   Yes—you feel free to use this hour for yourself

C-41   Next week then.

(Interview closes)

T-30 begins the final step in the structuring process. Announcing the close of the interview five or ten minutes before seems to have value. It prepares the client for the closing and he is therefore not cut off too abruptly. Rank mentioned too that it oftentimes causes the client to face problems which he has been avoiding in the previous part of the interview.

C-31 indicates how very grandiose this student's phantasy view of himself has been at times and how bitter and disillusioning is the facing of his real limitations.

In T-32 the counselor makes a clear-cut statement of the relationship. The client now has worked through to the insights (1) that he has many problems; (2) that they are serious; (3) and that he wants to work them out himself with someone's help but without losing his independence.

C-33 expresses accurately the fear that probably is in most clients' minds who have never experienced any other but the ordering and directing type of counseling. This student has apparently undergone this sort of emotional reprimand and appeal many times previously and he does not want any more of it. As long as the client had this idea of counseling, definite structuring counselor responses would probably have been rejected. They would only

have aroused the client's hostility and fear if they had been made, (1) while the client was convinced he only needed sex instruction, or (2) while he was still not sure his problems were serious, or (3) while he had not yet taken upon himself the full responsibility of the interviews but had only come because someone sent him. Now, however, his very satisfying experience of releasing confusion that was pent-up for years to an uncritical and sympathetic person and dawning insight into the seriousness of his problem, combined with the realization that here he is not going to be lectured to and ordered what to do, all result in the desire to continue the counseling relationship.

C–34 beautifully expresses what good counseling should do   As a result of insights gained, the client should, at the closing of the interviews, have a "foundation" upon which to structure a new and more satisfying life adjustment. At the end of the counseling process the client is not necessarily totally adjusted and mature—oftentimes he is far from it—but he has a solid structure of developing independence, security, and deeper understanding of himself which, under ordinary conditions, should continue to grow through subsequent months and years into an increasingly satisfying life-pattern of self-directed insights and choices

T–34 makes clear to the client that the counselor will be there to help him but this help will not impede, but rather aid, the client's urge toward independent "working things out" for himself   The client must be enabled to feel the uniqueness of his relationship with the counselor, a relationship that is worlds apart from the "Do-what-I-tell-you" advice he has so often bitterly experienced before

The satisfactory experience he has already had this first hour enables the client to concur in C–35

In C–36 the client, sensitive about what others think of him, is still fearful that just talking about himself may be wasting time. The counselor, in T–36, makes it clear that he is genuinely glad to have him come and that it will not be any waste of the counselor's time   One might call this the final step in the structuring process. The counselor's handling of the client's fears about wasting time is far more significant than may appear at first sight   If the client is to have the courage to continue the contacts he must leave the interview with some feeling of achievement.   If his predominant thought is that he has wasted the counselor's time, and that is not clarified

by the counselor, the client is apt to feel so discouraged that he will be unable to return and face what appeared to be a failure In the beginning the client does not measure the success of the interview with the same standards as the trained counselor. The client does not always see the significance of the things that he talks about and, in retrospect, his most significant releases may appear silly. A response like T–36 both furthers the structuring of the relationship and gives the client assurance that, however unimportant the things he said in the interview may appear to him, they actually have significance and value in the judgment of the trained counselor. The client is then able to absorb the counselor's judgment and he leaves the interview feeling that he is taking part in a constructive achievement and not merely talking foolishly. This small success is the first step which causes the client to want to return and enables him to seek greater gains in subsequent interviews

In C–37 the counselor sets a definite time for the next interview, an obvious point but sometimes forgotten This is important for a number of reasons. It definitely establishes the fact that the counselor wants to see the client again. Otherwise, the client in his embarrassment and confusion is apt not to ask for a definite time himself but to end the interview with, "Well, I'll drop around and see you sometime when I'm feeling low again" Then, the setting of a definite time gives a fixed and stable basis to the relationship and both counselor and client can feel that something permanent has been established, that it is no longer a casual contact.

C–39 gives further indication of how strange this relationship seems to the client. Accustomed to having people tell him what to do, he still needs further assurance that in this new relationship his talking freely is a significant contribution. T–39 and T–40 give him this further assurance and the client leaves the interview still quite mystified at this unusual experience, but feeling at least that while he does not see it clearly he is taking part in something constructive which will in the end enable him to settle his problems.

Second Interview with A

The second interview took place a week later, as arranged The following is an excerpt from the opening of the second interview:

T-41 Well, how have things been?

C-42 Well, I felt quite a little relieved after I left here last week—at least for a few minutes And I think on the whole I felt quite a bit better I began to take a more objective viewpoint Another thing that was rather interesting, it was brought up once in class, the different problems that adolescent boys and girls have—and just by fitting them into my particular situation I began to see that it is really nothing more or less than a normal problem Uh—uh—that way I feel quite a bit relieved (pause) And, uh—I used to think it was just something very peculiar with me and that no one else in the whole world would have the problems that bother me But in getting them from that viewpoint, I study the thing out a little bit and you can see that others are bothered in a similar manner caused by probably the same things—so, I do feel a little bit relieved (laughs) (pause)

T-42 Yes, you feel—things aren't so bad

C-42 Well, yes, I do in a way Things are beginning to clear up a little anyway— uh, just to talk them over with someone it gives a person more of a feeling of security to have someone at least helping you and maybe giving you a few suggestions (pause)

T-43 Yes—you feel things are more objective—at least—as a person sees that difficulties of adolescence are pretty much common

C-44 I do notice—what I was telling you about things being so happy, I could think that over and I decided it was nothing more than having a free and clear mind Whenever—uh—I really get my mind off myself and get out and mix, I—uh—a lot of things begin to clear up at least temporarily And that—what I describe as being happiness—is nothing more than a sorta state of mind And sometimes, I should say most of the times, I have quite a struggle with my school work. It has been terrible the last week in college I do find, however, my mind is clearer I can concentrate much better So, uh, I, you said you had to look for your own problems, well, we will try to look for it now, so I can put my mind down to the things I should do

T-44. Yes—you feel that having the mind clearer—really brings you happiness

In C-42 the first interview was obviously very satisfying for the client and he got a great deal out of it. He no longer has the desire to look upon himself as someone unique in the world, different from anyone else, but now he wants to tackle his problem from "a more objective viewpoint." To enable the person to see and judge himself objectively is precisely what good counseling should do. The phrase, "I study the thing out a little bit," gives a bird's-eye view of the amount of constructive thinking about himself this student has done during the week. In this kind of relationship, what goes on between interviews is probably as important as what takes place in the interviews themselves. When the client feels the responsibility for thinking out his own problems, he is very apt to continue to think them out, outside the counseling relationship.

C-43 expresses the great satisfaction that the interview has brought the client. While he is still far from a solution to all his problems he can already say, "things are beginning to clear up a little "

C-44 gives further indication of how observant the client has been of himself during the week and how much constructive thinking he has been doing   Already he has achieved one clear-cut insight and seen it verified in his own experience: "Whenever I really get my mind off myself and get out and mix, I—uh—a lot of things begin to clear up at least temporarily. And that—what I describe as being happiness—is nothing more than a sorta state of mind."

The concluding statement of C-44 shows how clearly defined in the client's own mind the counseling relationship has now become: "So,—uh,—I—you said you had to look for your own problems, well, we will try to look for it now, so I can get my mind clear on all these things, so I can put my mind down to the things I should do." The structuring responses of the first interview have achieved their effect. Either at the end of the first interview or sometime during the week the client grasped clearly his relationship with the counselor: the counseling interview is a situation where he can come and use the counselor's skill in the clarification and working out of his own problem; he is not, however, going to be able, and he does not want, to depend on the counselor nor is he going to be made defensive by the counselor's criticisms or comments. He sees the interview now as a relationship in which he can, with complete freedom, take up any problems that he feels are disturbing him. He sees that the degree and rapidity of progress depends in a large measure on the amount of effort he himself makes

SUMMARY

The steps in the structuring process illustrated in this interview are:

I   Client is encouraged to express his feelings freely   T-1, T-2, T-6, and especially T-5

II.   Client is left with responsibility   T-3 and following responses, which clarify feelings expressed by client, especially T-32 and T-34   T-10 combines I and II

III   Forking responses to allow client to talk about whatever he wishes.   T-13 and T-24.

IV   Hostile and negative, as well as socially approved, feelings are accepted T-21 and T-22

V   Client's desire for independence accepted and the client is aided to see that this relationship will not destroy but further his urge to independence   T-28

VI   Client is assured that his talking freely is worthwhile   T–36, T–38, and T–40
VII   A definite time is set for the next interview   T–37

The development of the client's attitudes about the interview are:

I   Someone else is responsible for his coming
II   Only needs information
III   Begins to express his own ideas of his problem
IV   Problem is wider
V   Ambivalence $\begin{cases} \text{Problem is serious} \\ \text{Everyone like himself} \end{cases}$
VI   Accepts problem as serious
VII   Wants to retain his independence and not be ordered and directed
VIII   Wants to return for more interviews

Upon the acceptance of each of these counselor structuring responses the client gains a new understanding of the unique relationship between himself and the counselor   The interview is not then a preparation for meeting reality, but life and reality itself in a unique relationship.   Even the most confused client, if he is a possible subject for counseling at all, appears to have within himself the independent urge and latent capacity to meet reality.   But unreleased emotional tension, confusion of goals, and lack of self-understanding and self-esteem make the real world a fearful place that is filled only with anxieties and failures.   The client must depend on others for security in all his decisions or withdraw from reality in fear and defensiveness.   The counseling situation, therefore, must allow the client an experience in reality which he takes on his own responsibility, which is at the same time a gradual seeing of himself objectively through the clarifications of the counselor. The warmth and acceptance of the counselor remove from the client those sources of anxiety and failure which up until now have made it impossible for him to cope independently with the real world. Probably the most fundamental part of this structuring process is the client's slow acquisition of the understanding that he can both be himself, admit his hostile feelings and failures without defensiveness and at the same time feel assured that he will have the counselor's continued acceptance and that he can achieve, with the aid of the counselor's skill, an independent solution of his problems. These seven structuring responses with corresponding client acceptance seem to be among the more definite steps whereby this understanding of the counseling relationship is developed in the client.

THE FUNERAL OF "SISTER PRESIDENT"

BY JOSEPH H DOUGLASS

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A SHORT time ago, while I was principal of a little backwoods high school and a participant-observer in a small town on the Mississippi Delta, I was caught up in one of the greatest social events ever to befall our little Negro community

Lo and behold! "Sister President," mother of the church, had died when "she was just getting ready for the annual convention of the missionary society at Jackson." Word-of-mouth reported that she had died one year, one month, and one day later than her husband, "Reverend President," the greatest preacher ever to have circulated in those parts Rumor had it that a good neighbor upon being informed of Sister President's death immediately fell dead herself

The staunch church members quickly proceeded with the arrangements for the funeral. Circulars in the form of handbills were printed and distributed throughout the communities of the county, announcing the time of the funeral and the prominent personages to appear on the program Reverend H— was to officiate, and a prominent singer was to come all the way from Rosedale, a distance of ninety miles, to sing "over" Sister President one of her favorite songs—"Life Is Uncertain, but Death Is Sure."

The day of the funeral finally came Very few of the persons (if any) went to work that morning and some had driven scores of miles to be present St Andrew's Church could not accommodate everyone interested, so as a consequence hundreds of persons were milling around the sides and front of the building

At about eleven o'clock, shortly after services had begun, the frame walls of the church started to crack under the immense strain of the large numbers within, so someone had the idea of finishing the services at the school

Shortly I saw great numbers of persons "swarming" over to my institution Fowls and pigs that heretofore had been walking complacently in the roadway now fluttered, cackled, and bolted in various directions, adding to the confusion I rushed out to contact

the minister or whomever I could to ascertain what was happening, but I was immediately pushed aside Pretty soon I saw a dozen or more persons running with a casket in the direction of the building. Someone finally told me in a wild-eyed fashion that—"the church is fallin' down—dey gonna finish havin' it at the school "

I rushed back indoors to attempt to dismiss the children, but saw them already scampering in all directions. One of my teachers (a refined, quiet, modest little lady, if ever there was one) jumped out of the classroom window Children were trampled upon and "shooed" out Some were crying, others were laughing and had gone into the auditorium along with the crowd

After approximately one half hour, the seats were arranged. Additional benches had been brought over from the church and had been placed around the walls One of the ministers was complaining miserably about his pocket-book containing one hundred dollars that had been stolen as the crowd rushed from the church to the school.

The services got under way again Eight or ten ministers were seated on the platform together with the combined church choirs. Seated down front were the members of the various mystic burial orders to which Sister President had belonged. Two groups that I recall were the Knights and Daughters of Tabor, and the members of the Order of the Beautiful Star The Knights carried in their hands cardboard swords, and the members of the Beautiful Star were dressed in white robes having on their heads paper crowns on which were pasted silver stars They had all filed in ceremoniously and had been allowed to be seated—the crowd being held back. When they had taken their seats the people rushed in and sat on whatever was available Some of the persons were sitting two and three to a seat, on one another's laps Others sat on the window ledges and still others reclined against the walls

The "rattling" of feet began, and as the ministers delivered their sermons various members of the audience would give shrill screams and fall prostrated Responsive ushers would place these persons out on the lawn and a relative or friend would burn chicken feathers, placing the fumes to the noses of the victims to revive them. (The feathers had been brought along especially for this purpose.)

The eminent singer from Rosedale, an elderly gentleman, was late in arriving and was unable to force his way through the crowd

to the platform. News of his presence finally got to the stage and
one of the preachers stated that—"if the good brother from Rosedale
will go 'round to the side, we might kin git him in through the
window" This he did He was able to sing Sister President's
selection.

Occasionally a choir member would get so enraptured through
the rendering of a song that she too would be overcome and would
have to be carried outside The pianist cried sadly throughout the
services and from time to time she would look mournfully out to
the audience, resting her chin downwards on one shoulder Some
of the persons were not quite "out" when they yelled and resisted
attempts to remove them. With wild swinging of the arms and
with cries of "unloose me," "unloose me," they struggled against
anyone attempting to take hold of them In instances like these
the more muscular ushers would "grapple" with the victims and
would secure "arm locks" on them, holding them taut until they
were subdued.

Finally, the great Reverend H—, who had reserved last place on
the program for himself, gave his sermon. He started off very
piously and soberly, talking of Sister President's wonderful spirit,
her achievements, and her general love of humanity. With con-
sistent "egging" from the ministers on the platform and with cries
of "come on, come on," Reverend H— too entered into the spirit
of the occasion He snarled, gnashed his teeth (displaying a set of
bright yellow gold), gurgled, growled, and gasped, apparently
losing control of himself at intervals. Dramatically and with appro-
priate gestures he likened Sister President to a "great soldier":

> An' standin' therefo having her loins girt with truth—and havin' on the breas'
> plate of righteousness And her feet shod wid the preparation of the gospel of
> peace—and above all—'bove all—takin' the shield of faith, and the helmet of
> salvation and the sword of the spirit, which is the word of God

This last part of the sermon was repeated over and over again for
increased emphasis. One lady sang out from the back of the audi-
ence in a high shrill soprano voice—"It's early in the evenin'—and
my soul is getting tired." Others remarked "Well" and "Lord"
at heightened intervals (Words can scarcely express the tension
that pervaded the room)

The audience "rattled" their feet, clapped their hands and cried
out "Amen! Amen!" With much mopping of his brow, Reverend
H— (with his coat now hanging partly off) was pulled back to

his chair by some of the other ministers, some of whom shook his hands and others of whom patted him on his back. At this time the choir started up a chant of the "Old Ship of Zion." With the first verses being sung, at least a score of persons screamed and cast their arms into the air—"Have mercy, Lord" With each successive verse an increasing number joined in. When they proceeded to the words, "it has landed my dear mother," bedlam broke loose. Some of the people danced if they could find any space, patting themselves on the legs while skipping sidewise, some caressed their neighbors, others slapped someone, and still others were content to just "give out" with piercing yells This continued for at least twenty minutes, finally coming to an end with grunts and a dwindling of the "rattling" of feet

The announcement was given that the audience could now "view the remains" As the persons passed the coffin some said "Goodbye, Sister President—I'll be seeing you soon" Others just wept, drying their eyes with one hand, while finishing up a sandwich with the other, as food had been brought along. It was well after three o'clock when the "viewing" was over.

When they attempted to inter the remains of Sister President, several persons had to be withheld from jumping into the grave One person succeeded and had to be helped out of the excavation.

After the tires that had gone flat were fixed, the mules hitched to the wagons, and the drunken persons "gathered" up, they all made the long trek home to talk for months about the "time" they had had, and to await with patience the next great occasion

ANALYSIS

The funeral of "Sister President" is here presented because it seems to offer a concrete clinical case by which to test (1) existing classifications of types of crowds, and (2) the alleged principles of crowd behavior frequently found in textbooks What we want to know is whether the abstractions relating to crowd behavior that fill sociological and psychological discourses do in fact fit an honest-to-goodness crowd, selected more or less at random

One common distinction in typing crowd behavior is the distinction between *mobs* and *panics,* the former expressing aggression, the latter fear. Clearly, "Sister President's" is neither a mob nor a panic Rather it represents a ritualistic occasion during which

normal audience responses became heightened through a series of circumstances. Aggression and fear, if present, are minor factors

Another principle of classification has been suggested by Blumer.[1] This author distinguishes the *active* crowd, the *expressive* crowd, the *casual* crowd, and the *conventionalized* crowd Although this funeral group was energetic and even exultant, it lacked the planfulness and direction of aggression that Blumer ascribes to an *active* crowd It was not an *expressive* crowd, though much activity occurred, the emotional release was apparently identified with and projected upon an ideal-object—Sister President. She became a symbol typifying the potentialities of the group's members and through her the lowly individual vicariously received status She became the image of the unconquerable spirit and the great soldier, freed at last from the cultural repressions and frustrations under which each individual in the group labored To this extent, the behavior, as observed, was more resultant in nature, more symbolic, than abstractedly expressive.

Due to the period of preparation, of expectation, and of build-up, the audience could not under any circumstances be said to comprise a *casual* crowd Although ritualistic, and in this sense conventional, the occasion goes beyond Blumer's conception of a *conventionalized* crowd because of the appearance of "extra" factors in this collectivity, such as the loss of critical judgment, individual submergence, and the heightened suggestibility of the individual to his fellows.

MacIver suggests the *like-interest* crowd and the *common-interest* crowd[2] The former is brought together by the curiosity of individuals who happen to be in the vicinity of some occurrence. This type has no common purpose and MacIver asserts that each person could satisfy his curiosity better if he were not incommoded by the presence of others. Clearly, in the case of "Sister President" the individuals of the collectivity shared in the occasion through a definite "will," as well as purpose, and the presence of others was prerequisite to their participation and emotional release MacIver's second type (*i e.,* the common-interest crowd), develops out of sudden need—a crisis, a group joy or hatred, a festival, the death of a hero It may express tumultuous admiration of its heroes but

[1] Herbert Blumer, Collective behavior In R E Park (Ed), *Outline of the principles of sociology* New York Barnes and Noble, 1939 Pp 233–240
[2] R M MacIver *Society* New York Farrar and Rinehart, 1937 Pp 187–191

its impulse to action is most likely to find a destructive outlet, he says The case in point is very similar to this form in origin, but contrary to it in operation as the impulse to action appears to be in the direction of exaltation with tendencies toward destruction absent or very clearly minimized if at all present

Since "Sister President" does not fit at all comfortably into typological categories, we may wonder with some justification whether these "forms" are empirically helpful. As "ideal" types they may have their uses in directing attention to processes that can be conceptually distinguished But for empirical use they seem faulty.

Turning to the *principles of crowd behavior,* we find a somewhat more encouraging picture Certainly the following principles are clearly illustrated.

1. *Crowd behavior is the expression of pre-existing attitudes.* Guests at "Sister President's" funeral came from distant fields and streams where life is both difficult and monotonous Past experience had shown them that forgetfulness and recreation result from active participation in a group ceremony. They wished to forget their loneliness; they wished to belong, they desired the exaltation that comes from mysterious rites that bridge the drabness of this world to the glory of the next

2 *Social facilitation enhances the behavior of each member* The sights and sounds of others moaning, beating time, and praying clearly heightened the volume and intensity of each person's performance

3 *Motor participation is essential for crowd phenomena* The moving of the services from the church to the school occurred on the spur of the moment. This factor of spontaneity added greatly to the excitement of the occasion, for as the people ran to keep abreast of the proceedings they became more animated physically This increased activity enhanced the likelihood of the persons' losing control of themselves and giving free physical expression to their emotions

4. *Enhanced suggestibility is evident.* In many respects we find the phenomena of enhanced suggestibility. Attention was limited by the energetic speakers, by the casket, by the rhythmic music. Each idea implanted by the speakers and singers fell into the well-worn grooves of thought and feeling Rationality, critical judgment, individualized thinking, were minimized.

5. A leader obtains identification and directs the responses of the crowd. By long habit the audience readily assumed the attitudes suggested by their preacher. Upon the actions of Reverend H— in particular depended much of the extreme behavior of the group When he entered into the spirit of the occasion and fanned the flame of excitement by visibly throwing off his own restraints, he gave approbation for any and all exaggerations of behavior. The crescendo resulted

6 *Crowds fatigue* The "viewing of the remains" and subsequent interment were more in the nature of an anti-climax to the behavior of the crowd Although feeble attempts were made at revitalization, to all intents and purposes "Sister President" now was dead. It was all over

Although other principles of crowd behavior could be enumerated, it is clear that these that we have cited are among those most commonly mentioned On the whole, we may say the funeral of "Sister President" can be represented fairly well in terms of these principles.

In brief, the "principles of crowd behavior" would seem to be valid, inasmuch as they do not, when applied, violate the uniqueness of the concrete crowd situation. Put to one concrete test the "laws" of crowd behavior hold up well. On the other hand, typing crowds would seem a more hazardous undertaking The funeral of "Sister President" was a one-time event. To it the laws of crowd behavior apply, but overall categories of classification fail.

RETRAINING AN AUTOCRATIC LEADER

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B OTH practical experience and careful experiments have demonstrated the effectiveness of certain group methods in the training of leaders.[1]

Some of the newer techniques are yielding insights into the dynamics of changing leaders, so the time seems ripe for case studies which describe these methods and attempt to make explicit some of the emerging hypotheses concerning their effectiveness.

One of the most interesting techniques of leadership training is the role-playing method [2] Stemming from the psychodramatic and sociodramatic methods of therapy used by Moreno, there have been a number of recent applications of role-playing methods to the problem of leadership training [3] These applications are particularly worthy of attention because they indicate that the problem of leadership training involves both the problems of learning as ordinarily studied in the laboratory and the deeper problems of personality and interpersonal relations.

The present case study of one application of the role-playing method is selected from a larger study of leadership training conducted by the Boy Scouts of America [4] A brief summary of the behavior of one leader *before* and *after* attending a training institute is given, but the main focus of attention is the role-playing method used in the institute

BEFORE TRAINING

Before training, Smith's behavior as a course leader was measured by observing one of his training courses for scoutmasters. He had

[1] Bavelas, A Morale and the training of leaders Chapter VIII in Watson, G (Ed), *Civilian morale* New York Reynold and Hitchcock, 1942

[2] Lippitt, R The psychodrama in leadership training *Sociometry,* 1943, 6, 286–292

[3] Moreno, J L Psychodrama and mental catharsis *Sociometry,* 1940, 3, 3

[4] Prof. Kurt Lewin played an important role in the designing of this cooperative research project Under his guidance, the author directed that part of the project centering in the State University of Iowa and acted as an observer at the meetings described The findings of the study have not yet been published but some materials are available at the Research and Statistical Service, Boy Scouts of America, 2 Park Avenue, New York City

had many years of experience, both as a scoutmaster and as a trainer, and was an expert on scouting practices, yet he was a poor trainer.

As a leader, he could be characterized as an unsuccessful autocrat. At all times he kept the determination of policy firmly in his own hands The scoutmasters were placed on a definitely inferior status-level, while he himself maintained the role of the expert who knew all the answers. Since the course was too small to be run as a "training troop," his method of training was to lecture in a droning voice, with eyes fixed on the table in front of him, rambling from one subject to another. Frequently he would read aloud long passages from the *Scoutmasters' Handbook*.

Smith was extremely egocentric, both as a course leader and in more informal, personal contacts During the meetings, he continually bragged about the successful scout troop he used to have, and was continually citing his past experience in an ego-boosting fashion There was almost no consideration of the troops of the scoutmasters who were being trained

In fact, Smith was quite insensitive to the needs of the group. When a question was asked, he would frequently interrupt before the scoutmaster could finish his question. His answers almost invariably described his own troop rather than solving the scoutmasters' own problems.

The reactions of the group were apathetic—for the most part they sat and listened in boredom. Almost no interactions among members occurred—their participation was limited to brief questions directed to the leader By the end of the course all but two members had dropped out, and these two were making excuses to leave the meetings early.

THE TRAINING INSTITUTE

After his course was finished, Smith and four or five other trainers attended a training institute conducted by Bavelas. The purpose of the institute was to teach the trainers how to produce more effective democratic scoutmasters. Two of the more important aspects of the philosophy of training of the trainer who conducted the institute were: (1) A leader must *experience* during the training process the kind of leadership and the style of group living which you wish him to use as a leader. (2) In order effectively to change the actual behavior of a leader he must receive some on-the-job training which permits the trainer to influence his behavior in

the real life situation. These two principles determined the general pattern of the training.

The institute consisted of five meetings, with a total of about thirteen hours. During the first two and one-half meetings, the trainer used a democratic method in leading a group discussion; for the next one and one-half meetings he used the role-playing method, and the final meeting consisted of on-the-job training.

In the discussion, an atmosphere of friendly, equalitarian inter-action was established Members were encouraged to express their ideas freely, and all important questions of policy were determined by group decisions. The discussion covered such topics as the insecurity of new scoutmasters, their training needs, and the values of the group discussion method in meeting these needs. The importance of leadership in developing good character and citizenship through the scouting program was discussed at some length, but more than half of these first two and one-half meetings was devoted to discussion of how to lead a group discussion. Specific leadership techniques such as avoiding an irrelevant question by postponing it, or watching the group carefully for reactions such as head-shaking, were considered

The most distinctive feature of this part of the discussion was the trainer's frequent use of his own behavior, or the reaction of the group, as an example He would point out in a matter-of-fact, unself-conscious manner that he had praised a shy member to stimulate participation, or he would bring to the attention of the group the fact that his last question had *failed* to stimulate discussion because it had been a purely factual question. Thus a style of realistic objectivity in discussing leadership behavior was established

ROLE PLAYING

At the middle of the third meeting of the institute, after a high level of discussion had been attained, the trainer introduced the role playing He explained to the group that they knew enough about discussion methods at the verbal level, but would not be able to use them successfully without considerable practice. Therefore, he was going to ask the members of the course to practice leading the discussion The remaining members were to play the roles of new scoutmasters, since all of them would be concerned with leading discussion by new scoutmasters.

Although the idea was clearly comprehended by the members of

the group, some of them found considerable difficulty in carrying it out in the beginning. Smith in particular found it very difficult to assume the role either of the leader or of a new scoutmaster. This difficulty seemed to be, in part, a form of resistance to the method Smith, who was appointed to lead the first discussion, protested at first that he was being put on the spot Apparently his former security had disappeared considerably during the previous discussions and he no longer felt so confident that he would be glad to exhibit his ability as a leader However, he was soon induced to start leading the discussion.

Without consulting the group, he chose as a topic the *Patrol Method,* and proceeded to lecture for ten minutes almost without interruption The observers were amazed at the completeness of his regression to the style of leadership he had used in his first course Even his voice changed from an informal discussion voice to that of an "expert" who knew all the answers Instead of watching the group he droned on in a monotonous voice with his eyes fixed on the table. The other members, who had been accustomed to discussion, tried to enter in by asking questions; but Smith would interrupt the questions to answer at such great length that there was almost no member participation

At the end of ten minutes the trainer interrupted him to discuss his leadership methods. He pointed out that Smith had lectured without interruption, that there was really no discussion at all, that the members seemed less interested than before, etc. This was done in a matter of fact—even friendly—manner, but it was completely realistic. The trainer also referred back to the previous discussions, pointing out numerous specific techniques that could have been used to improve his discussion leadership.

Immediately following this friendly criticism the other members of the group took turns in leading the discussion for a brief period. It was evident that the group was rapidly going through what Moreno calls a "warming-up process" They less frequently dropped out of character and rapidly lost their self-consciousness in playing the roles. There was no longer any indication that they felt uncomfortable; in fact, there was already some enjoyment of the dramatic aspects of the role playing

After all the other members had practiced leading the role-playing group, the trainer took his turn. Thus he had an opportunity to demonstrate just how to meet some of the problems which had

troubled the trainees in their attempts to use the kind of leadership which they had "learned" during the discussion.

Later in the meeting, Smith again took over the leadership of the group   Already there was noticeable change.   He actually stimulated discussion by applying techniques previously suggested by the trainer, such as asking questions of the group members, referring the question of one member to another member, and using praise for good contributions   This improvement in leadership was pointed out by the trainer and spontaneously praised by the group.

At about this time the trainer began to play a more complicated role in the group   At first, he had sat as an observer and given suggestions and advice only at the termination of a period of practice leadership   Now he, too, became a group member playing the role of a green scoutmaster   Frequently, however, he would suddenly drop this role momentarily to act as trainer.   For example, when Smith did a good job in steering the direction of the discussion, then the trainer would momentarily drop his role as a scoutmaster and praise Smith for his successful techniques.   In other cases he would interrupt the group process, almost parenthetically, to suggest a better technique of handling the present situation   Sometimes he would stop the leader momentarily to point out a good opportunity to use some techniques which had been discussed previously.

Thus, the trainer was actually playing three different roles in rapid succession.   Much of the time he was a new scoutmaster and a member of the group just like any other member   At other times he was a coach giving on-the-spot training by the use of parenthetical remarks which scarcely interrupted the flow of the discussion   His third role was as the discussion leader.   At the end of each period of practice leadership he would lead a more extended discussion on the techniques that had been used, the effects on the members of the group, and ways of improving the leadership.

At the beginning of the *fourth* meeting, the members spontaneously and enthusiastically suggested that the role-playing technique should be continued   The trainer accepted this group decision and started out with Smith again leading the group   The following protocol illustrates the functions of the trainer in this type of role-playing situation   The protocol is not an exact verbatim record but has been condensed to show a greater variety of the techniques that

were actually used during the fourth meeting   The italicized
comments which precede a speech point out the different roles
and functions of the trainer and some of the reactions of the trainees.

Trainer   *(Beginning a transition from discussion to role playing)*   I am interested
in your outline of the course   How are you going to find out what's
bothering them?

Smith·   I don't know yet

Trainer   Do you think the same procedure we used last time was valuable?
(referring to a diagnostic technique demonstrated by the trainer)

Brown   Yes, sure it was, then you have a written list of their problems so you
know what to take up

Trainer.   *(Assigning the roles is done briefly because the group has played these
same roles previously)*   Well, let's have a demonstration then of how
Smith is going to run his course   Let's suppose now that it is next
Wednesday night   Smith will have a group of green scoutmasters coming
to his course   Now you take over, Smith, and show us how you will go
about finding out about the problems of these green scoutmasters   The
rest of us will play the roles of the members of your course, so you just
start out the way you will Wednesday night [5]

Smith   *(Has not yet accepted the role   He talks about it instead of playing it)*
For the first step, we will have to use a lecture for three or four minutes
to explain the set-up of the course   The people who are going to take it
should know the reasons for it

Trainer   *(Reinforcing the role playing)*   Yes, that is certainly a good idea, now
show us how you will start   We'll be the green scoutmasters

Smith   *(Starts playing the role of trainer)*   We are all here for a purpose   I was
a green scoutmaster once   I was not only worried, but I was scared to
death   I suppose some of you fellows are in the same boat   Now, how
can we run the course to help answer the questions that are bothering
you?   (Smith drops his role to explain that if he gets no response from
the general question, he will ask a particular scoutmaster what problems
he has run up against in the past few weeks   He goes on to explain at
some length the problems that he expects—namely, how to organize a
troop program, what to do about advancement, and what to do about
discipline problems)

Trainer to Smith.   *(Playing the role of discussion leader)*   Well, that is pretty clear.

Trainer to Group   Any questions you want to open for discussion?

Jones·   Yes   What about the scoutmaster who can't handle all the test passing
for his troops?   Should he get the committeemen to help?

Trainer   *(Mimicking Smith in an unsuccessful attempt at "complacency shock"
The trainer mimicked all the worst aspects of Smith's behavior as a
leader—his habit of looking down at the table while talking, his officious*

[5] Note that the roles played by the group members are abstract roles rather than concrete
roles of some particular individuals that they know   It should also be pointed out that the
stage was set in an abstract way with no concrete description of the physical setting of the
meeting, such as Moreno commonly uses

droning voice, his egocentrism, etc , etc)[6] Well, I'll tell you about that
Of course, the scoutmaster can't do all the test passing himself, particu-
larly if he is new on the job You can't know all about first aid and knot
tying and signaling and everything else in scouting So naturally you
have got to have some help And that is what the junior leaders are for
It says right in the *Handbook* that the junior leaders should be used for
test passing Now, I'll tell you what I used to do in my troop I had a
big troop and every patrol leader in the troop had at least some merit
badges When it came to test passing I sort of made specialists of them
There was one boy who had the first aid merit badge and he used to
pass all the tests on first aid Then there was another boy who did the
same thing for signaling Of course, there are other possibilities—some
troops use the committeemen—but experience has shown that it is best to
have your junior leaders do it Let me tell you

Smith　　*(Interrupting to start a discussion)* Well, what if you don't have junior
　　　　leaders who are good enough?

Wilson　　Yes That would be a problem in my troop One of my patrol leaders
　　　　is just getting his second class

Trainer to Member　*(Since the "complacency shock" was unsuccessful, the trainer
　　　　again starts the role playing)* Better ask Smith that question Remember
　　　　now that we're all acting as green scoutmaster's and he's the leader.
　　　　Smith, you take over now and try to weave everybody into the discussion

Jones　　Well then, Smith, how do you go about organizing the troop committee?
　　　　That is the difficulty I'm having now You see, when I took over there
　　　　were only two committeemen and they weren't much help Now am I
　　　　supposed to get other committeemen and if so how do I do it?

Smith　　I have seen troop committees formed in a number of ways but it might
　　　　be a good idea to try to have a committee where each one has certain
　　　　activities to oversee (He lectures in an authoritative voice for a minute
　　　　and a half)

Trainer·　*(Playing the role of coach; uses a more direct technique in place of the
　　　　unsuccessful "complacency shock ")* Let's stop for a moment and discuss
　　　　how things have been going Smith, you have a deep-seated habit of
　　　　answering the question completely This leaves the scoutmasters with
　　　　nothing to say and ends the discussion Then you sometimes ask a
　　　　leading question, one that doesn't stimulate discussion because it just asks
　　　　for a "yes" or "no" reply I may be getting too tough but I want to bring
　　　　out the points as I see them

Smith　　It is good to bring them out at this time so we will learn them

Trainer　OK, Smith, continue with the discussion

Jones to Smith· Well, do I have to choose the committeemen or is that up to the
　　　　the sponsoring institution itself?

Trainer to Smith. *(Acting as a coach)* Now pull in Brown

Smith to Brown Well, how is that done in your troop, Mr Brown?

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[6] Some sort of complacency shock seems to be particularly necessary in the process of
retraining secure, experienced leaders This particular attempt was unsuccessful because
Smith was not sensitive enough to recognize that it was a take-off. One other member
winked at the observers to indicate his recognition of the mimicry

Brown   Well, I'm not sure—you see, the committeemen were all there when I started and we haven't needed any new ones

Smith to Group   Have any of the rest of you recruited new committeemen lately?

Wilson to Group   Yes, we have in our troop   One man left for the Army so we needed a replacement   The troop committee asked me to come to their meeting and we talked the whole thing over   They suggested a couple of names and there was one man that I knew, so we agreed to ask him   I think he is going to be fine

Fowler to Wilson   Well, when one of my committeemen left two months ago they just chose another man and I didn't know he was a committeeman the first night he came to the troop meeting

(Trainer shakes his head vigorously to test the sensitivity of the leader to the reactions of the group members)

Smith to Group   Well, here are two different ways of doing it   Which one do you think is best?   (After some discussion, there is general agreement that the first method is better)

Trainer to Smith   That is a good technique—linking up problems brought up by the different men   There is another thing I noticed—both you, Jones, and you, Smith, have the habit of looking down at the table while you are talking, not looking at the men   It helps a lot if you watch the group carefully   Then you get cues about the way they are reacting and you know when a man wants to speak   If you talk down at the table nobody knows who you are talking to and you don't know how they are reacting to what you say   You can never shake your head in a discussion I'm leading without my noticing it.   OK let's continue

Smith to Group   Well, I think we're agreed on the best method of choosing the troop committee but we haven't yet answered Jones's question of how to organize it   Does anybody have any ideas on that?

Fowler to Smith   In my troop, I know they have regular meetings and usually one of them comes to the troop meeting   Then I find out a little bit about what they are supposed to do   There is one fellow who knows lots of knots and I use him to teach knot tying

Jones to Fowler   Well, how do you find out who can teach things like that?

Fowler to Jones   Well, when I first took over the job of a scoutmaster, the troop committee chairman told me about this man   He's done it for years

Smith to Jones   Well, do you get a chance to see your committeemen very often? Could you ask them at meetings about what they could do to help?

Jones to Smith   Yes   I suppose I could.   One man is the father of one of my patrol leaders and he comes around pretty often   His son is one of the best boys in the troop and he seems to know something about scouting

Trainer to Smith·   *(Ostensibly playing the role of a green scoutmaster, but actually testing the leader)*   I don't seem to have very good patrol leaders in my troop   What is the best method of getting good patrol leaders anyway?

Smith to Trainer·   Well, there are four or five methods of doing that. .

Trainer to Smith·   *(Interrupting and playing the role of discussion leader)*   Let's stop here for a moment and take a look at the discussion   Is the discussion leader at the mercy of every question thrown at him, even irrelevant questions?

Smith to Trainer   Yes, that bothers me.   How can you ever get anywhere if you have a discussion where everybody asks questions about all kinds of things?

Trainer to Group   How did the rest of you feel about that question I asked?   Was it relevant?

Jones to Group: No, we were getting off the track

Fowler to Group   We should have finished discussing the troop committee first.

Jones to Group   I think Smith should have kept us on the track

Smith to Jones   I thought of that, but if you're trying to lead a discussion you've got to give people a chance to talk [7]

Trainer to Group   Yes, but discussion doesn't mean that the group just wanders around from one subject to another   When you're leading the discussion you know what the group is supposed to be talking about at the moment If somebody asks an irrelevant question you can just set it aside   Tell them we'll take that up when we come to the discussion of patrol leaders But first we have to finish talking about the troop committee   Do you think you know how to handle that situation now?   Now, let's continue Smith you take over

Smith to Group   *(Again in the role of leader)*   Well, we were talking about how to get the troop committeemen really functioning   Sometimes the committee will take the initiative but apparently they don't always do it What do you scoutmasters think can be done if your committee just doesn't seem to be very active?

Jones to Smith   Well, I don't hesitate   I ask them   Now last week I had a problem   I had to be out of town on meeting night so I just called up the chairman and told him and he said he would get together with the other committeemen and find out who could take over the meeting   That's all I had to do

(Trainer, playing the role of a green scoutmaster but again testing the leader, shakes his head vigorously)

Smith to Trainer   What's bothering you?   Don't you like that idea?

Trainer to Smith   *(Taking the role of coach)*   That's fine!   That's wonderful! You're not missing a trick now!

Trainer to Group   *(Taking the role of a green scoutmaster again)*   It says in the *Handbook* that the committee chairman should be responsible.   He ought to come to the scoutmasters and offer help.

Smith to Group   Yes   That is the way it is supposed to be and if the committee is a good one that is the way it works   But it doesn't always work out that way and then you have to do something else

Jones to Smith   So you'd say it's all right to ask them when you need them

Smith to Jones   Sure

Trainer to Smith   *(Taking the role of coach)*   Now pull Brown into the discussion

Smith to Brown   Did you ever have to ask your troop committeemen to help?

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[7] In changing to more democratic methods, it frequently happens that an autocratic leader will become *laissez-faire*   If he has rejected his old autocratic methods but has not yet acquired skill in democratic techniques, his leadership is weakened and he is almost forced in the direction of *laissez-faire*

Brown to Smith I'm sorry I didn't hear that question To tell the truth I was thinking of fishing (Loud laughter by the group)

Trainer to Group *(Taking the role of coach)* You see how you have to watch every minute to keep a discussion going

Smith to Brown I asked you if you ever had to call on your committeemen to help

Brown to Smith Yes A couple of weeks ago we were planning a hike and I called up one of the men about getting hold of some equipment He was a big help—he even offered to go on the hike

Smith to Brown Yes, that is just the point I was about to get at—you can use your committeemen for hikes and special events

Trainer to Smith At that point better say "That's a good idea" rather than "That's the point I was just about to get at " It makes the members' ideas seem more important and you'll get better participation that way

The remainder of the meeting continued with the members taking turns in leading the discussion. Interest and enthusiasm was running high, and it was clear that all members of the group had definite feelings of marked improvement.

Throughout, the trainer structured the future for the members, pointing out what techniques could be used when they next ran a course, what kind of problems might arise in the discussion with green scoutmasters, etc.

At the final meeting of the training institute, the members observed the first meeting of Smith's second training course for scoutmasters Following this observation the trainer led a group discussion on the techniques used by Smith, praising him liberally and making a number of constructive suggestions. The trainer even warned him not to lean over backwards, for Smith had changed enough from his former autocratic leadership so that he was at times *laissez-faire* in his leadership

After Training

Observations of Smith's leadership during the last four meetings of his second course, after his training had been completed, showed an interesting pattern. His leadership during the second and third meetings was markedly different from his behavior during the first course He used a wide variety of techniques learned in the institute, and created a distinctly different group atmosphere. At the fourth meeting he attempted to review the first three meetings for a new course member with the result that he regressed back to a form of leadership very similar to what he had used in the *first* course In the final meeting he returned, part way, to the use of the techniques learned in the institute

Comparing the second and third meetings of the second course with the first course, Smith's behavior had changed so markedly that the observers spoke of it as a "metamorphosis" Not only did he use about a dozen new specific techniques of discussion leadership, but the general style of leadership was different. He had changed from an unsuccessful autocratic leader to a successful democratic leader. The members of the course took an active part in determining what problems should be discussed, the leader no longer lectured as an "expert," and the whole group atmosphere was changed The members participated in an easy manner with evident interest and satisfaction. The leader maintained more friendly relations with the members and no longer showed the sharp differentiation of status

DISCUSSION

The results of the post-training observation have shown the marked effectiveness of the training institute, in spite of regression and the instability of part of the new pattern of leadership. Much of Smith's improvement apparently occurred during the role playing. The observation of these changes provides the basis for a number of tentative theories. In presenting these hypotheses explaining the effectiveness of the role-playing method, we shall proceed from the simple and obvious to the more complex and more highly inferential

But first, it should be pointed out that role playing was only a part in a larger pattern of leadership training, and its effectiveness probably depends upon its function within this pattern. The institute started with *discussion* which permitted the leader to organize the group and establish his position of leadership, to provide through his own behavior a model of the style of leadership which he wished the trainees to use, to set a pattern of frank unbiased discussion of leadership behavior, and to teach, at least on the verbal level, the basic principles and the specific techniques of leadership to be used. At the same time, the discussion led to rather clear changes in ideology which were undoubtedly an important preparation for the subsequent changes in behavior The role playing served as a bridge between the learning in discussion and the later on-the-job training Its value probably stems in part from the fact that it permits an easy gradient from talking about leadership behavior to actually practicing it in real life situations.

Three advantages of the role-playing method are clearly in agreement with learning principles In the first place, the trainee practices what he will have to do later on, namely, leading green scoutmasters Thus, the problem of transfer is to a large extent eliminated. In the second place, role playing provides a close connection between behavior and reward and punishment. The trainer can *immediately* reinforce with praise the desired kind of leadership behavior and eliminate with criticism the errors In real life this is impossible to do at the moment It can be done only later on when the specific situation has been partially forgotten by the trainee A third related factor is the knowledge of results Most leaders in need of training find it very difficult to discover whether or not any type of leadership behavior is leading them to the goal they wish to achieve. This is particularly true in regard to the more detailed aspects of their behavior In the role-playing situation the trainer and other members of the group can point out to the trainee the results of his behavior Thus, he can acquire the detailed knowledge necessary to change his behavior in the desired direction

One of the major problems of training is the diagnosis of training needs. *It is clear that many trainees are not aware of their own training needs and hence verbal methods of diagnosis are inadequate* Very often observation of the leader in a real leadership situation is not possible. Role playing provides an excellent substitute. Not only does it give plenty of opportunity for observation, but it also permits the use of more experimental diagnostic techniques. In the previous protocol, for example, the trainer, acting as a member of the group, shook his head to test the sensitivity of the trainee to the reactions of the group Later he asked an irrelevant question to discover whether the trainee had actually learned how to handle such a situation. Such experimental testing probably yields a better diagnosis of training needs than is possible through simple observation.

"Sensitivity training" seems to be an important part of the process This means that the trainee must become sensitive both·to the reactions of the group he is leading and to differences in style of leadership. Both types of sensitivity training can be admirably achieved through role playing The trainer can sit at the elbow of the trainee as he leads the group and point out the reactions of the members. Such immediate guidance is necessary because the

reactions are often so subtle that it is difficult to describe them afterwards Likewise, in order to see and appreciate differences in leadership, the trainee must have the opportunity to observe these differences himself In the role-playing situation the trainee can observe, under expert guidance, many leaders in a short period of time Furthermore, he can observe them under identical conditions; *i e,* leading the same group in regard to the same problems. Such advantageous conditions of observation are not possible in real life

It should be pointed out that with role playing the trainee increases his sensitivity both while leading and while acting as a member of the group. In the role of the green scoutmaster, the trainee becomes more sensitive to the problems of green scoutmasters. Insofar as he is able really to identify with the role, he acquires both an understanding and a sympathy which are important in skillful democratic leadership.

Perhaps the most important advantage of role playing is the fact that it increases the trainer's control of the social environment. By assigning different types of roles in accordance with individual training needs, by selecting appropriate dramatic situations, and by playing different roles himself, he can control a wider range of reactions by the group than is possible in discussion

In the present case study, for example, the role playing helped the trainer to increase the enjoyment, morale, and cohesiveness of the group. It enabled him to provide a situation in which Smith could satisfy his need for recognition *only* by using more democratic techniques The verbalized recognition by other members of the success shown by Smith gave him a powerful motive for improvement. On the other hand, the trainer, in the role of a member of the group, could change the social situation for an insecure trainee so that he could more easily establish a position of leadership. Thus the trainer can mobilize in many different ways the potent influence of the group in order to achieve his purposes

Certainly the most distinctive aspect of the role-playing technique is the fact that it takes place on the "level of irreality." The dramatic, play-like characteristic clearly departs from the ordinary processes of teaching and learning and takes us into the problems of personality structure and interpersonal relations.

On the level of irreality the trainee seems to lose some of his rigidity of personality. Smith's first attempt to practice new techniques of leadership in the institute was a complete failure because

neither he nor the other members could successfully assume a role at the start An hour later, after the "warming-up" had progressed, the trainees played their roles with real enjoyment of the dramatic play As a result, Smith was suddenly able to discard his habits of many years and to use an entirely new and different style of leader-ship [8] No longer hampered by the fear of failure, he was free to experiment because he was not "playing for keeps"

This feeling of freedom was not purely subjective, Smith was actually in a new and freer situation where he was no longer bound by the role expectations of a rigid group It seems highly probable, for example, that it would have been impossible for Smith to intro-duce suddenly during his pre-institute training course some newly learned techniques of leadership The group had built up such clear and definite role expectations that any attempt, for example, to stimulate real discussion in that group would have been doomed to initial failure because they were so accustomed just to sitting and listening In the role-playing group, on the contrary, it was possible for him to change markedly and actually to get discussion from the group. Probably this fluidity of the role-playing group affects nearly every aspect of a trainee's leadership, for leading is a form of behavior which is highly dependent on the reactions of the followers.

CONCLUSIONS

We have presented some case material on role playing as a method of training leaders and discussed some theories explaining the effectiveness of this method. Though derived from the study of a single case, those hypotheses which merely repeat known principles of learning and those concerning the diagnosis of training needs and sensitivity training are sufficiently probable for practical appli-cation. They should be helpful to any trainer who wishes to use role-playing methods.

The hypotheses concerning the mobilization of group influence and the effects of the level of irreality have theoretical significance, for such hypotheses are the necessary first steps in future research.

[8] This fluidity of the role-playing situation is probably more important in the *retraining* of leaders than in the initial training of new leaders, who do not ordinarily show as great rigidity

A CLASSROOM DEMONSTRATION OF "PSYCHICAL PHENOMENA"

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THE United States periodically witnesses the growth of popular interest in "spiritualism," "telepathy," and a variety of other occult movements This interest is by no means limited to the uneducated or the less intelligent, but is manifested by a representative cross-section of the population ranging from borderline psychotics to "distinguished physicists" and "eminent Boston physicians." The spiritualist movement is fostered to some extent by psychical research societies who publish the results of their experiments when these are "positive" (3), but for the most part its growth must be attributed to clever, unscrupulous tricksters who prey upon the public's gullibility and of course its pocketbook In critical and uncertain times, such as in the present war period, the pickings are indeed rich

During the past several years the writers have been surprised at the number of students in their elementary psychology classes who frequented "mediums" or worked out their personal problems at the Ouija Board, and at the still larger numbers who were keenly interested in these matters and who would require very little convincing The outright skeptics constituted a small minority. The writers therefore decided to work up a program which would provide an interesting demonstration of suggestion and, at the same time, a convincing lesson in the need for careful evaluation of so-called "psychical" phenomena For this purpose the methods of such noted exposers of spiritualist fakery as Houdini (2), Dunninger (1), and McComas (3) were adopted.

THE DEMONSTRATION

The lecturer (L), speaking seriously at a pace which permits note-taking, begins with a ten-minute pseudo-scientific discussion of the problem of psychical phenomena He informs the class that has has had the good fortune to work with Doctors A and B,

pioneers in the field, who were the first to put the work on a scientific basis   He decries the lack of understanding and appreciation of this work which is manifested by most modern writers, but he points out that any innovation in science must inevitably meet opposition.   Selecting the problem of mental telepathy for special consideration, L presents the position that a good deal of the confusion existing at present is due to failure to realize the physiological basis of the phenomena and to neglect of individual differences. Elaborating, L discusses (with illustrations) electroencephalography and individual differences in thickness of the cortical layers. "Senders" show more intense EEG waves, while both "senders" and "receivers" are found to have thicker cortical layers and consequent decreased resistance to the passage of these waves.   (At this point the lecture is garnished with the physical formula relating resistance to the diameter of the conductor)   As might be expected from the greater quantities of cortex which they possess, "telepathists" also tend to be more intelligent   The only findings concerning skeptics indicate that they tend to be irreligious and often are atheists or agnostics.   (Students who may be tempted to heckle can do so now only at the price of associating themselves with a socially disapproved group.)

L now announces his intention to experiment with various psychical phenomena under "controlled laboratory conditions," and asks the students to judge for themselves the adequacy of the evidence presented.   He requires only that they remain quiet and save their questions until the conclusion of the experiment.

Beginning with telepathy, L modestly admits that he has some sending ability and introduces Mr C as one of two persons on the campus known to have receiving ability.   C leaves the room while four students selected at random are each asked to write a number from 1 to 25 on the blackboard.   The numbers are averaged and carefully erased, and not a word is spoken.   C is recalled by a member of the class   He and L face each other directly in full view of the class and within two feet of the nearest spectator.   L holds a "psychic bulb" in one hand, and both gaze intently at it.   After several seconds C announces the correct number.

L immediately begins to pass out heavy envelopes and white cards to various members of the class   He asks them to write questions about the future on the cards and seal them in the envelopes. He announces that he will attempt to read and answer the ques-

tions before opening the envelopes C collects the envelopes and passes them to *L,* who now takes each one in turn, presses it to his forehead, and makes known both the question and its answer. Then he opens the envelope to confirm his reading and at the same time requests confirmation from the writer of the question. After all of the questions have been read and answered, anybody who so wishes may examine the cards and envelopes.

For an experiment in long-distance telepathy, a class committee is asked to name an ordinary playing card. After a moment's concentration *L* asks another committee to phone Miss D at a specified number and ask her to name the card. They do so and return to report that Miss D was correct

While the people are telephoning Miss D, *L* asks another member of the class to think of the last name of a person he knows and to "bury" the name in a list of eight other names After receiving the list *L* glances at it, concentrates, and announces the correct name.

L now announces the final experiment and the most difficult one—an attempt to materialize one of the guiding spirits which so often seem to aid telepathic communication The class is asked to concentrate upon the experimenter, and the room is darkened. After a short period *L* asks if anyone sees anything, and several individuals report seeing "something ghostly " Finally *L* suggests that more "power" may be needed and asks the class to sing the "Battle Hymn of the Republic " During the singing many students exclaim that they now see a "ghostly face " A few seconds later the lights go on and the experiment is ended

The tricks employed are very simple and, it must be emphasized, depend for their effectiveness on the set provided by *L* during the introductory lecture. In the first, *L* sends the number to C by appropriate movements of only one ear. The ear on the side away from the audience is used, and C, fixating the psychic bulb, observes these movements in peripheral vision. A variety of other minimal cues probably could be employed, if the sender does not happen to have voluntary control of his *auricularis superior.*

The envelope trick can be done in many ways (1; 6) The method used requires a student confederate who asks a known question When collecting the envelopes C places the known question on the bottom *L* deals with this question first but opens

a different envelope for "confirmation." In this way he can remain one question ahead

In the telephone trick, the name of the person to be called is a code word which the receiver quickly deciphers (6) The buried name trick is based on the observation of minimal signs The individual who writes the names usually will hesitate before writing each name except the critical one (6). L talks to the class during the writing, but observes the writer's progress indirectly. "Ghost" figures also can be produced by a variety of techniques (1, 3).[1] In the demonstration described the outlines of a face were painted with an anthracene solution on the projection screen which L was accustomed to using In ordinary light the figure is completely invisible, but in the darkness ultraviolet illumination causes it to fluoresce In a small room a flashlight equipped with an ultraviolet filter serves as the light source, although in a larger room stronger illumination is required. It is interesting that some individuals report the "spirit" before it is actually visible and continue to report it after the light has been extinguished

Immediately after the "experiments," L asks the class the following question: "On the basis of the evidence presented how many of you are now convinced of the reality of psychical phenomena?" To date this demonstration has been presented to three different groups—an introductory psychology class (N = 171), a laboratory class in psychology (N = 25), and an Army premedical psychology class (N = 25) Seventy to 80 per cent of each group answered the question affirmatively. After the students have indicated their attitudes L announces that the entire lecture was a hoax and the experiments mere trickery. The reaction to this statement is invariably an embarrassed silence followed by a mounting tide of laughter. Requests for information about the way in which the tricks were performed are denied, as it is explained, in order to promote better retention of the demonstration. L then proceeds to a discussion of the general problem of psychical phenomena, the anecdotal character of much of the evidence presented, the motivational bases for belief, and deceptive techniques employed by frauds. The work of Rhine (5) is evaluated and sharply distinguished from charlatanry

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[1] It should be recognized that this last trick represents a definite break with the previous four, being of a more mystic nature and putting a far greater strain on the audience's credulity

SOME DATA ON ATTITUDINAL SHIFTS

The writers attempted to obtain further information concerning the effectiveness of the "experiments" A questionnaire dealing with attitudes (belief, uncertainty, or disbelief) toward such psychical phenomena as were "demonstrated" was submitted to the large class during the period following the demonstration The students were asked to indicate anonymously what their beliefs had been before the lecture and immediately after the experiments, *i e ,* before *L* exposed the hoax The results are presented in Table 1

TABLE 1

ATTITUDES TOWARD PSYCHICAL PHENOMENA BEFORE AND AFTER THE "EXPERIMENTS"

N=171

	BEFORE LECTURE	AFTER "EXPERIMENTS"	CRITICAL RATIO
Believe	15 8 per cent	42 7 per cent	5 7
Uncertain	56 1 per cent	37 4 per cent	3 6
Disbelieve	28 1 per cent	19 9 per cent	1 8

The increase in the number of "believers" and the decrease in the "uncertain" group were significant, but the number of "disbelievers" did not change reliably As was noted above, many more than 42 7 per cent of the students raised their hands to indicate belief at the finish of the "experiments" Apparently many students who originally had raised their hands rated themselves in retrospect as having been merely uncertain [2]

In Table 2 the data are analyzed to indicate the changes within each of the original attitude groups Several of the believers became uncertain or incredulous probably because they were sufficiently acute to detect the lecturer's purpose. The same may be said of the uncertain students who shifted in the direction of disbelief These changes probably accounted for the fact that the total number of disbelievers was not significantly reduced by the "experiments" (Table 1) In actuality the percentage change in the original disbelieving group was as great as that in the uncertain group, which is contrary to what might have been expected on the basis of experiments in modification of attitudes (4).

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[2] Of course it would have been more valid to obtain these ratings before and immediately after the "experiments," but the procedure employed tended if anything to minimize the obtained differences

TABLE 2

ATTITUDE CHANGES WITHIN THE ORIGINAL GROUPS

BEFORE LECTURE	AFTER "EXPERIMENTS"							
	BELIEVE		UNCERTAIN		DISBELIEVE		CHANGE	
	No	PER-CENTAGE	No	PER-CENTAGE	No	PER-CENTAGE	No	PER-CENTAGE
Believe (N=27)	21	77 8	4	14 8	2	7 4	6	22 2
Uncertain (N=96)	44	45 8	39	40 7	13	13 5	57	59 3
Disbelieve (N=48)	8	16 7	21	43 8	19	39 5	29	60 5

SUMMARY

A technique for presenting a pseudo-scientific demonstration of psychical phenomena is described   Its effectiveness is illustrated by the fact that it produces statistically significant shifts of attitudes in the direction of belief in these phenomena   The demonstration indicates the need for careful evaluation of evidence in this field and, at the same time, illustrates the role of prestige suggestion in the modification of attitudes.

BIBLIOGRAPHY

1 DUNNINGER, J   *Inside the medium's cabinet*   New York   Kemp & Co , 1935
2 HOUDINI, H   *A magician among the spirits*   New York & London   Harper, 1924.
3. McCOMAS, H C   *Ghosts I have talked with*   Baltimore   Williams & Wilkins, 1935
4 MURPHY, G , MURPHY, L B , & NEWCOMB, T M   *Experimental social psychology*   New York & London   Harper, 1937
5 RHINE, J B   *New frontiers of the mind*   New York & Toronto   Farrar & Rinehart, 1937
6 THURSTON, H   *400 tricks you can do*   Garden City, N Y   Blue Ribbon Books, 1940.

THE PHENOMENOLOGICAL ANALYSIS OF PERSONAL DOCUMENTS

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E VERY man who believes he can read an author's personality
between the lines of the book thus pretends to be a psycho-
logical "document analyst" And, in that very general sense,
document analysis is among the oldest and most commonly used
psychological techniques That method for studying the individual
personality remains, however, one of the much neglected psycho-
logical methods so far as its actual technical elaboration is concerned
The academic psychologist characteristically scales down his sub-
ject-matter to the level of his own very conservative methodology.
And his refusal enthusiastically to accept document analysis as one
of the really pivotal techniques for investigating the individual per-
sonality well harmonizes with his general reserve. This seems
particularly unfortunate where very revealing documents such as
diaries, sets of personal correspondence, or informal autobiographies
are available for use in personality analysis. Yet the notion that the
planes of cleavage in personality can be revealed, and the lines of
individual development traced, simply by perusing such personal
documents, does seem over-optimistic That, however, is no valid
reason for denying a potentially important component-field in the
psychology of personality the serious and prolonged attention that
it deserves Such attention is required today particularly as regards
its curiously undeveloped methodology which, were it once trans-
formed into an experimentally validated, if systematically limited,
subsidiary approach to problems of personality, would do more than
any amount of philosophical pleading to establish document analysis
as a universal procedure for attacking such problems.

Once this is admitted, almost any method, if regarded simply as
tentative and experimental, should be welcomed as a candidate
And, when the search for a helpful method begins, we are con-
fronted with important alternatives· Should the document analyst
borrow his method from better-established fields or should he create

a new method for specific use in his own field? Either procedure might be rewarding, and both should be encouraged On first inspection, however, it would seem that a borrowed method would have to be so much renovated before it would be valid for document analysis that we might as well start without any special presupposition excepting the most general laws of logic and the empirical orientation of all modern psychology Here, at any rate, we shall concentrate upon the latter procedure, and shall introduce a method which owes no explicit apology to other types of personality research, but which arose as a solution to problems internal to psychological document analysis. The writer also would show that it is quite possible, while observing all due caution in methodology, to establish document analysis as secondary to no method for the exhaustive investigation of the individual personality.

Let us take our point of departure from considering the "surface contents" of the typical personal document Now it is quite true that the persons who write a common type of autobiography, diary, or personal letter sometimes seek thereby to exhibit their own virtues. Yet it may be said that in almost no document is the self the topic for most frequent explicit comment There are more "I said's" and "I did's" and "I believe's" and "I admire's" or "I detest's" or "I hope's" than there are "I am's," "I have been's," or "I would be's." And even the explicit comment about the self, its traits, and the values which adhere to it usually takes its point of departure from a context of comment about events to which the self has reacted, situations within which the self operates, or values in the world with which the self feels identified. In other words, and to simplify, the characteristic personal document is a system of personal expressions about a personal world within which the self is experienced as a part. What, then, should prevent the document analyst from taking the more obvious and easier course· What should prevent him from first of all exploring and characterizing the personal world as it is thus expressed in the document? Later, if that were thought necessary, the more oblique and difficult task of inferring and characterizing the nature of the expressive person might be undertaken

But would that be necessary for the psychology of personality? Would not the more obvious and easy procedure be equivalent to the more oblique and difficult one? Is not adequate characterization of a personal world tantamount to adequately characterizing

the personality? There is only one way to answer that last question in terms which would have a valid operational meaning, and that way is to determine whether persons can reliably and systematically be compared and contrasted through comparing and contrasting personal worlds as revealed by personal documents The aim of the psychology of personality consists precisely in striving to develop a method by means of which individual personalities may be compared and contrasted upon a generally applicable frame of reference The only important question now before us is whether psychological document analysis can provide such a frame of reference, and whether this is done through enabling us to compare personal worlds, or in some other way, is a secondary consideration. The psychologist should prefer that particular method of document analysis which is more nearly in accordance with his general aim than is any other method

Such reasoning is so attractive in its purely logical aspects that our suspicions are at once aroused The empirical psychologist, like any other type of scientist, must avoid being misled by any *tour de force* of logic Accordingly, we should now pause to appraise the concept of "personal world." And this pause will allow us to consider for a moment our position in the history of modern psychology As soon as such terms as "personal world," "inner world," and so forth are suggested we recall the traditional introspective method in psychology, and we recall its defects

The traditional introspective method had two grave faults which lost for it its one-time centrality in psychology First, it yielded direct insights concerning one mind only, namely, the investigator's own subjective processes Secondly, its researches were directed by the arbitrary principle that atomic elements are the only important termina of investigation. This second limitation fairly may be said to have been overcome in the first decades of the Twentieth Century by a whole series of attacks, spearheaded from different directions by Gestalt theory of perception, by psychoanalytic dream interpretation, by personalistic psychology, by the phenomenological movement, and by such holistic introspectionisms as that represented by Felix Krueger's theory of affective experience Today the notion of exploration of the inner world, an exploration that will note its large contours and its meaning-relations, as well as the detailed items and content-relations, is well established in much psychological theory, as also in much recent philosophy. But the first

limitation is only now coming under systematic attack Only now are we developing methods for exploiting the category of expression and, even now, to speak of exploring the inner world of another in a much more fundamental way than would be possible through his conscious introspective reports remains a sign of rather extreme optimism

Critical problems soon arise in connection with the assumption that expression reveals inner experience Sometimes it is asserted that the affective gesture well may indicate momentary states, but that such expression is not relevant for directly investigating the more enduring structure of the inner world. That objection is answered, at least partly, by distinguishing between superficial and deep expressions, and between more or less functionally inclusive expressions Certainly some extensive personal documents, such as diaries, autobiographies, and sets of intimate correspondence represent inclusive expression and include deeply significant expressions if any material does But we are called upon to be much more definite than this. We are called upon to indicate definite selective criteria for determining which personal documents shall be regarded as most adequate for personality analysis

Three criteria are suggested as a first approximation towards resolving that difficulty To be valuable for personality analysis the personal document should be sufficiently inclusive in regard to time so that it may be assumed that the expressions in it are not determined by a fleeting mood This criterion may seem to lack scientific precision and it may be said that affective cycles within a particular personality may cover days, weeks, or even years. That is true, but it may be replied that the same difficulty would prevent any method of psychological investigation from discovering all the potentialities in the personality Indeed, such potentialities "exist" only in reference to "potential" environments for the self. There is no way of studying a personality over a limited period of time and thus predicting its later character beyond all doubt.

The adequate personal document must also be inclusive in content to the extent that it seems to offer some evidence concerning most of the factors in personality which have been stressed by recent investigators. That does not mean that the psychological document analyst should use the same categories as other investigators It does mean that he should use their work as a check upon the inclusiveness, and also upon the accuracy, of his own. Although

there need be no one-to-one correlation or translation between categories used for different purposes in psychology, different modes of describing the same object should be sufficiently comparable to provide a wholesome system of checks and balances

One more criterion must conclude our statement concerning the adequate document   The function of each personal document, as a part of the total expression of the individual, should be investigated by the document analyst on the basis of internal, but preferably also of external evidence. Thus, for example, no set of letters written to any one recipient should be regarded as adequate even if they cover a long period of time, or if they express opinions about many things. Nor should a diary which obviously rationalizes some one field of personal striving (for example the "crush" diaries so common to adolescent girlhood) be regarded as adequate unless supplemented by other material.

Our three criteria of inclusiveness in time, content, and personal function are not meant to be regarded as taboos, but only as evaluative principles in a psychological context. For purposes other than the scientific study of personality, for example, aesthetic purposes, they may be neglected.

Thus we have given at least a preliminary solution to a major critical problem. An even more challenging question arises, however, when we ask concerning just how the meaning in expressions, whether it is local or general for a personal world, is discovered. Even now, the old, traditional battlelines between inference-theory versus intuitionism, as rival means of collecting data, and between the inductive versus the deductive method for correlating data are being established in the young field of personal document analysis. There is grave danger that the conclusions and partial conclusions attained in other fields and at other times will be neglected rather than being adapted for use in the newer field. Therefore, we should at this point answer that challenge by a systematic statement of a theory of interpretation

We have spoken of exploring personal worlds. Here we may give that endeavor a name. "Phenomenology" would seem to be the proper term   To be sure, some so-called "transcendental" phenomenologists have proceeded to explore experience as though the structures in it could somehow be detached or "bracketed" from the personal life history. The psychologist, despite the best of intentions, will probably fail to be able to take that transcendental-

istic preconception very seriously. The phenomenological method here to be displayed may be called a "psychological" phenomenology, and I have called my own phenomenological method "Integral Phenomenology" for reasons some of which may be noticed in following this discussion further. At this point we may presume general agreement that all experience is historical and that it is functional for the individual personality

Phenomenology is the systematic exploration and description of inner worlds It differs from purely "common sense" guesses or from literary description in at least three important respects · First, phenomenological description must be continuously systematic while literary description may lapse from the systematic when convenient. Secondly, its systematic character is determined by no absolutely coercive selective principles other than the principle of coherence which requires that the experienced meanings which are reported should be described in the broadest, most harmonious context of meanings which an inner world, as introspectively known or as mediated by personal expressions, provides after exhaustive exploration Literary descriptions may be based on more special selective principles, such as those related to dramatic values Thirdly, phenomenological description must rigorously distinguish between meaningful contents, whether atomic or "gestalted," and secondary interpretations It is not denied that primary contents may be based on "subliminal" interpretations, but "common sense" is notorious for confusing between the immediate and the most complex, secondary elaborations For example, the "man on the street" does not distinguish between memories from a past event and memories from his thinking about that event between its occurrence and the latest review of it in memory Phenomenology insists upon the value of reaching as primary a level as possible, but a psychologically oriented phenomenology will not hazard the assumption that absolutely "presuppositionless" and unelaborated reporting of the Given is possible

We indicated above that the phenomenological method admits of no absolutely coercive principles excepting the coherence principle. That is not to say that it may not use other principles in a "regulative" manner in order to provide an energy-saving routine so long as the other principles do not involve adding to or subtracting from the given facts, and so long as they do not violate the coherence principle itself Thus it is proper to suggest as a regulative principle

that the investigator of inner worlds may often simplify tasks if he
concerns himself first with their totality-qualities and subsequently
with their local qualities. He should also proceed from whole to
parts in seeking correlations between qualities The question con-
cerning the number and definiteness of totality-qualities, and of
correlations between them in comparing different personal worlds,
may be answered empirically for each case: That there would be
some is the only assumption *a priori,* and no psychologist will deny
that it is plausible in that limited form. Here, then, is suggested a
sort of minimum, dogmatic integralism as a working hypothesis.

The concept of personal world is not merely structural, for such
worlds are processes The rate, modes, and content of either total,
or local, historical changes are equally important with structural
characteristics. Since local trends can be investigated in their rela-
tions to general trends, and since the coherence principle may be
used as a check upon tentative hypotheses, a personal world as
process involves no additional difficulties for an integral phenomeno-
logical method That any life history is an integralizing quest is a
"regulative idea," similar to the ideal designation of socialized
human organisms as integral "persons " Both "person" and quest
are conceived best as ideals, to which realities more or less approxi-
mate. The concepts are methodically valuable fictions and may be
used in similar ways. For example, the concept of a typology of
quests is quite as legitimate as the concept of a typology of persons
and has the same grave limitations

Our coherence principle provides the critical check upon intuitive
interpretations of particular expressions in a personal document So
far, we have assumed that many such particular interpretations are
absolutely intuitive That is not denied here, but it is asserted that
many local connections in a personal world are inferred by the
document analyst, rather than being intuited But inference, as well
as intuition, can lead to false conclusions. Neither is infallible, and
both should be systematically checked by the coherence principle.
And inference, unlike intuition, yields to advice based on precedents
Therefore we may here suggest certain guiding tenets for inference
by the document analyst. In attempting to discover relations of
personal significance between various local contents in a personal
world, the analyst may use the following criteria: explicit statements
in the document concerning relations between personal interests;
contiguity of expressions concerning different contents; symbolism

derived from one content and used to express another; and similarity of style used to express different contents   The several criteria should be used as checks upon each other, and all should be checked by applying the coherence principle.

In attempting to distinguish phases in the personal quest, as expressed in the personal document, the analyst may use four similar criteria. the subject's own statements concerning general changes in his situation, or main attitudes, or both; change in the usual contiguities, or the substitution of new ones; changed symbolic usages in expressing important contents, and general changes in style.   Here again each criterion should be checked by the others, and the tentative conclusion should be checked by the coherence principle.   Does the conclusion provide an inclusive picture of a personal world, and does the personal world seem as noncontradictory in its internal meanings as it would be possible to make it without adding to or subtracting from the data provided by the document?   At the same time it should be remembered that perfect logical harmony among these meanings is not to be expected   It must be repeated that the concepts of integral person and personal world, and of integralizing quest, are simply "regulative" ideals. After all, there is personal conflict, there are pathological personal worlds which are full of delusional systems, and there are life histories or segments of histories which include progressive deterioration of the person, and progressive disordering of the personal world

It might be asked whether any one of the four criteria for tracing connections in the personal world is more reliable than any other   I would hesitate to favor any one   In a recent article in this JOURNAL, Vol 37, No 2, April 1942, entitled "Personal structure analysis a statistical method for investigating the single personality," Mr Alfred L Baldwin applied the criterion of contiguity by means of an elaborate quantitative technique to determine connections between the major attitudes of one person as expressed in personal correspondence   He determined what the major attitudes were by asking what contents were most often expressed I would sympathize with the latter procedure more than with the former.   Even so, I should think that some persons might not know, and so could not explicitly express their major drives, or major biases.   Yet, in general, Baldwin's method does appeal because of its simplicity and precision.   That very simplicity introduces the most grave dangers for critically determining connections between personal interests.   This bias on my part follows from the observation that often a person deliberately or otherwise strives to conceal the practical basis of certain theoretical interests.   For example, in personal statements about death and immortality, about sex and sex morality, about exploitation and the need for reform, about unsocial traits in others and the desirability of changing them, and in many other cases, it

is exceedingly common for the person who is expressing himself to avoid all "ego-reference" This is true even for quite unsophisticated persons, for example, it is often true for adolescents who are worried about sex, death, etc Their personal problems are "sublimated" into general theoretical interests and expressed as personal problems more rarely, or with more restraint, and often quite apart from the expressions of theoretical interest in the general questions Deliberate conceal-ment, moral repression, and "face-saving" tendencies which may be quite uncon-scious, all play a part in determining that the "natural" contiguities in expression shall not appear Mr Baldwin may have been most successful in answering the limited questions which he posited for the case which he exhibited in his article I would urge that the limited nature of his questions indicates that his procedure constituted somewhat less than a personal document analysis in the sense used here I would also urge that, although his method may have enabled him adequately to answer the questions which he did posit for that case, the same method might lead him far astray in the analysis of some other case I have no objection to the use of statistical procedures as control devices But they should be based upon sufficiently inclusive criteria of connection and sufficiently critical appraisal of surface connec-tions But I have no quarrel with Mr Baldwin for, after all, what might be sufficient inclusiveness and finesse for one case might lead to incomprehensible conclusions from some other case Precision analysis of local connections should be regarded as an important virtue in document analysis, but should be undertaken only after general analysis reveals particularly ambiguous points Quite often phase changes in what I have called a "quest" and "complex indicative" symbolisms are altogether too obtrusive to be regarded as important only after elaborate quanti-tative investigation And yet they might be totally lost to an analyst who proceeds upon the basis of a single criterion of connection and an elaborate method of counting

We now pass to a consideration of induction versus deduction in correlating intuited or inferred factors in a personal world. If there is such a thing as pure induction no examples of it have been displayed in the context of modern science Every hypothesis in science rests upon an arbitrary system of interpretation. Experi-ment provides empirical justification after the event of formulating a frame of reference. Certainly personal worlds cannot be com-pared and contrasted "in the raw" They can only be so related with reference to some criteria for classifying the variety of par-ticular items in each. Some frame of reference is always required And, in psychology, such a reference frame must necessarily pro-vide basis for typological contrasts The pure types, whether of total personalities, or total personal worlds, or of single traits in a personality or in a personal world, should be conceived in relation to the frame of reference as indicating the extreme points on certain dimensions of variations. But it might be argued that any typology, even if so used in relation to a dimensional system, must overlook the most unique aspects of personality, because these are always

specific even in kind, to one alone   However, this difficulty will
not be taken seriously when we reflect that any dimensional scheme
is inadequate to the particular case at every point: By a "synoptic
intuition" of the total set of fictions, if it is sufficiently complex
to do justice to the case, the clinically experienced observer will
appreciate something very similar to the unique fact.   In order
to determine just what dimensions, and just how many, are ade-
quate for comparing and contrasting a particular class of cases,
we have no selective principle other than our coherence principle,
and here again it must operate upon intuitions and upon inferences
which are checked at each stage in a progressive analysis by means
of applying that principle itself.   Thus we have a sort of dialectical
process   The first intuitions and hypotheses are checked by the
coherence principle, some of these are thus validated and some
are ruled out and replaced by others, and then the new set of
intuitions and hypotheses is checked by the coherence principle,
and so on through progressive stages until a maximum of coherence
in relation to the data and the abilities of the analyst is attained.

Here we will suggest certain dimensions in terms of which fea-
tures of, and changes in, at least some classes of personal worlds
may be systematically explored and described.   Our dimensions
will be illustrated by an outline analysis of one case   Our dimen-
sions themselves may be classified under certain categories.   Each
category will stand for a whole series of dimensions, ranging from
dimensions which clearly fall under the particular category to
dimensions which clearly represent a sort of overlapping of cate-
gories and, finally, even to "impure" dimensions which are
generated from other dimensions   Obviously, an infinite number
of dimensions might thus follow from a few categories were the
logic pushed towards its utmost limit

Our categories are of three main kinds: formal, material, and
formal-material.   The formal categories are: the category of Form
and the category of Change.   The material categories are: the
category of Causation and the category of Value.   The formal-
material categories are· the category of Direction, the category of
Distance, and the category of Plenitude.

The categorial-dimensional framework for comparing and con-
trasting personal worlds as expressed in personal documents is
meant to be highly adjustable and it is possible to elaborate upon
it until the finest distinctions may be ordered to the systematic

total, yet rough distinctions may also find a place in the same system Our case will not be developed beyond a point necessary to give a working conception of the system The somewhat formidable conceptual system is most conveniently interpreted if we regard each category as simply standing for a group of questions that can be asked about the expressions in a personal document And each dimension under the particular category stands for a more restricted and highly specialized group of questions. This may be illustrated by examples

The category of Form subsumes questions concerning the complexity of expressions in the document, and the complexity in the personal world Such dimensions as that of cognitive complexity, expressed in theoretical statements in any personal document, and that of affective complexity or, better, complexity of evaluations are readily understood Other dimensions would apply to the form in these same respects of local parts in the personal world Yet other dimensions would refer to other aspects altogether than the cognitive and affective

Under the category of Change we ask questions concerning the rate of change in the personal world, or in some aspects of it, or in some part of it Appropriate dimensions may easily be named by the reader

Under the category of Causation we are concerned to discover the kind of connection between events in which the person believes This may be discovered either by means of his explicit statements in the document or by means of inference from his recorded modes of procedure Is he a fatalist? a mechanist? a teleological determinist? a believer in chance or luck? These various subcategorizations are best considered in dimensional terms, as most persons are only more or less one or the other, or may be ambiguous in regard to some of these distinctions and in regard to similar distinctions.

The dimensions under the category of Value indicate the degree of personal stress upon various kinds of values, such as economic, aesthetic, religious, logical, dramatic, erotic, and power values Both 'the person's explicit statements about his own attitudes and also any implications which the analyst may find in the person's reports about incidents in his life history may be considered in judging his evaluational orientation.

Under the category of Plenitude are subsumed the dimensions "full-empty," "intense-mild," and others. Does much or little

happen in the characteristic personal situation during some particular phase in the personal quest? Do events seem to have much emotional "kick?"

Under the category of Direction are subsumed any number of dimensions based on the "incoming-outgoing" contrast Does one regard one's value as derived from one's social position, or as welling up from within oneself? Do events just happen to one or does one dominate situations? Such questions illustrate the dimensions of incoming versus outgoing values, and incoming versus outgoing causes. Other directional dimensions than the incoming-outgoing group may be formulated by the reader

The category of Distance refers to the location of objects in which the person is interested and values most highly Is he more interested in the poker game down the street this afternoon or in the future destiny of some foreign nation, or does he prefer to speculate concerning how the solar system will meet its doom Distance in space and in time are obvious dimensions under this category. Distance from conventional norms is another important dimension. Does the person prefer objects and activities which represent *to him* conformity with norms, or does he have Bohemian, or eccentric, or even revolutionary inclinations?

Now we shall further illustrate our constructive set by categorizing a particular personal document upon the basis of excerpts from it. This document is a diary of over twenty volumes written by a male American college student during his four-year college period, but including some entries from the summer prior to his Freshman year It fulfills our three criteria for the adequate document, perhaps better than does the average document which is subjected to analysis in relation to the psychology of personality Yet perhaps the adequacy of this case, even for purposes of methodological illustration, might be challenged just because our document does represent "youth" That period is ideal for illustrating what the writer has termed "a life quest," for the questing character of youth is notorious, while some other period in the personal history might not so clearly reveal it Middle adulthood may flow·on like a broad, undisturbed stream without well-marked turning points Perhaps on some later occasion the writer will have opportunity to present some analyses of middle adult documents; requirements of space make that impossible here, and the youth diary is presented because the adult diaries which are available to the writer

are inadequate in certain other respects for the type of analysis here
to be exhibited. Indeed it must be admitted that the document
analyst seldom, if ever, comes into possession of a document whose
adequacy for unbiased methodological illustration is certain, and
it must be admitted that document analysis usually requires supple-
mentation by more direct methods for exploring personal worlds
Here some discussion of questing is in order, since the document
about to be analyzed especially illustrates the questing orientation.

The standard English dictionaries equate the term "quest" with the term
"search," but this is not in accordance with my phenomenological usage   On the
contrary, if we define modes of activity in terms of categories of goal objects, then
"search," "explore," and "quest" constitute a series of conation-types whose respec-
tive goals are "thing," "path," and "context"   Or, if we take for our criteria for
defining types of conation their media rather than their goals, it may be said that
one "follows" a "path," "explores" a "context," and "quests" a "world." for expan-
sion of "contexts"   One "quests" for enhanced plenitude in living through enrich-
ment of context, through opening new contexts
    We may now define a personal world as a system of more and less self-evident
contexts   It is therefore labyrinthine   As new contexts emerge in it the person
reorders his conceptions about the relations among the old, familiar contexts and
paths   Then the life quest is repivoted   A new conception of personal destiny and
a new interpretation of the personal past may appear as rational elaborations   We
have indicated that the mode of personal activity which we have called "questing"
is more characteristic of youth than of any other period in the average life history
Yet, perhaps, genius consists in maintaining the questing orientation all through
the life history   In childhood new contexts are usually induced from without, in
maturity the relations among established contexts are consolidated and further
differentiated, but youth yearns for the emergent context, and quests the better
"design for living"   In order to achieve such contexts youth may seek to destroy
prevailing ones   Youth is therefore more inclined towards radical attitudes and
revolutionary activities.

Our procedure in approaching the student diary will be as fol-
lows. First, some external information about our subject will be
presented, and then we shall mention some general characteristics
of his life history during the four-year period covered by the diary
Secondly, a very general outline of the phases in the quest which
the writer believes may be differentiated by means of the document
will be presented   Finally, a categorial-dimensional analysis of the
structure of the personal world for each phase in the quest will
be carried through on the basis of comments about the actual
student diary   This analysis is undertaken in order to illustrate
our constructive set of categories and dimensions, and require-
ments of space preclude a detailed analysis, or any exhibition of
control factors   The analysis therefore represents a first stage in

a systematic document analysis   Some questions to be answered by further analysis, but suggested by the preliminary analysis which is here presented, will be asked at the end

We now present some external information about our subject   The four-year diary was written during years of economic depression   Our subject was about seventeen years old when he wrote the first entry and about twenty-one when he wrote the last   He was an only child of rather old parents, and his father was a Protestant clergyman   His ancestral background was of that vaguely defined racial group which is called Anglo-Celtic, tracing to countries in the United Kingdom and to Ireland   Our subject was average, or somewhat above average, in height and weight   He was above average in academic standing

There are certain outstanding characteristics which remain more or less constant throughout this diary   For example, it contains much theorizing, particularly of a speculative or philosophical type   Undoubtedly a larger proportion of the entries expresses interest in matters not directly related to daily events in the subject's experience than would be the case in most personal diaries   Such entries may express theory, or dogmatic opinion, or emotional responses   Another important constant is the seeming self-conscious posing   This takes the form of exaggerated statements concerning sentiments and attitudes   It also takes the form of including in the diary the dramatic rather than the casual incidents of everyday life   Thus the document analyst might go far astray if he accepted all statements at their surface value   Critically considered, however, such self-conscious posing by the diarist may facilitate analysis   That is because many, at least, of the exaggerations as it were magnify sincere attitudes and underscore revealing situations   That, at any rate, is my conclusion for this particular case   The reader may judge whether it is tenable on the basis of the excerpts

The period which the writer distinguishes as the first phase commenced after our subject's graduation from high school and continued into the Sophomore year in college   In comparison with the other phases this one may be called a period of normal expansion in interests and normal increase in personal independence   Our subject enters college, enjoys the academic work, and indulges in various extracurricular activities   These include social, athletic, and cultural activities

The second phase commences about the middle of the Sophomore year and continues into the early part of the Junior year   This is a phase of radical disillusionment and revolt   It coincides with economic curtailment of our subject's activities and with deaths in his family   He joins various liberal and radical clubs and expresses contempt for conventional values   In fact, his attitudes even towards novel and unconventional values are tinged with contempt   It is a negativistic phase

The third phase commences before the middle of the Junior year and continues at least until the end of the available volumes in this diary   The second phase had been brought to an abrupt close when our subject was forced by economic circumstances and family fiat to change Alma Maters   Soon afterwards, however, the economic situation improved   We shall see that the radicalism was in part repudiated, but in part redirected towards more immediate and personal matters   This third phase may be called a phase of reconciliation   Increasing eroticism also characterizes it, but our subject seems to have only crumbs of satisfaction for loaves of frustrated ambitions   So the reconciliation, even in a narrow range of interests, was by no means complete

It must be admitted that there are transition periods between phases and that perhaps a quantitative analysis which was directed to this problem on the basis of the criteria for distinguishing phases which we outlined above might reveal important subphases   Perhaps other, equally legitimate ways of individuating phases might be developed

It must also be admitted that the excerpts which directly follow are much too few to convince a reader who is determined not to be convinced   Requirements of space make this inevitable   We cannot here illustrate all of the dimensions which we have indicated   And we can only include one, two, or three excerpts to illustrate any one dimension in any one phase   This latter limitation follows from the writer's preference to provide excerpts sufficiently long to include enough of the context of the crucial sentences to give the reader some basis for judging their personal function

CATEGORIZATION OF THE PERSONAL WORLD IN EACH PHASE IN THE YOUTH-QUEST ON THE BASIS OF ILLUSTRATIVE EXCERPTS FROM THE PERSONAL DOCUMENT

Excerpts Illustrating the Category of Plenitude

We will illustrate the category of Plenitude only in terms of one of its subsumed dimensions   This is the dimension of Intensity. The following excerpts from each phase indicate high intensity of experiences throughout the four-year period   Our first two excerpts are from the first phase; excerpts 3 and 4 are from the second phase, excerpts 5 and 6 are from the last phase.

1 A wonderful thing happened in the Libertyside Church   I have been thinking about it ever since

2 Ronald is a marvelous friend and our friendship will last for life, and for eternity if we see such a thing

3. The thought of death has a sedative effect upon my emotions, but a very stimulating effect upon my intellect   Romantic love, mystic experience, alcoholic indulgence and overwork may be excellent devices to help us forget our mortality, but they are trivial when we consider how unimportant personal happiness is in comparison with the advancement of the human race   Yet in quality of passion, as well as clearness of intellect, I am probably superior to any bourgeoise verbalist

4 Nietzsche disapproved of socialism because he thought it continued Christian aims   He mistook it for rule by the humble, and missed the cold logic of the situation   The humble as a means   Nietzsche can tell me nothing   So far as his historical knowledge went he was a perfect pewking infant

5 I have to boil when I talk to some people and they can only go with me over a certain range of ideas   They are like persons who can see from blue to green instead of from infra-red to ultra-violet   Their intellectual limitations are a bitter disappointment to me

6. There is a way of thinking that we do not have as yet   Must combine mathematics and mysticism.   I live for it.

Excerpts Illustrating the Category of Distance

The reader will note that a very high proportion of all our excerpts indicates interest in spatially and temporally remote objects and situations Here we will explicitly illustrate only the dimension of Distance from the conventional. Excerpt 7 indicates nearness to the conventional in the first phase and excerpts 8 and 9 indicate remoteness from it in the second and third phases respectively It should be noted that the unconventionality in the third phase is more personal and refers to more concrete and nearer objects than does the unconventional attitude of the second phase.

7 Well, we beat the Sophs 6–0 The touchdown was on a beautiful pass received by Ed Johnston The Frosh showed up great at times but not so well as we should We should have won about 18–0 I played one and three-fourths quarters I am going to the informal dance tonight, so it's about time for me to leave here for dinner Went to the Socialist meeting last night The crowd as a crowd are queer Don't know about their doctrines but the oddness of the crowd is all I need to know I don't want to be classed with that bunch I believe that the principle of higher sur-taxes and inheritance taxes, etc, is good Also a lower tariff and state control of public utilities But all that will come under a capitalistic rather than a socialistic regime, I believe I don't believe the socialists have enough men of technical and executive ability to run the nation's enterprises efficiently if they were given a chance, anyway The crowd there last night was far from prepossessing

8. If you mean by a good person one who is constantly questing for greater perfection then a Christian is not a good person He spends most of his time in trying to keep stainless, etc He accepts a certain set-up as perfect and does not have the imagination to pierce beyond the veil of convention, or of time, or of place, and try to see what is beyond He does not try to analyze the matter of society and see if he couldn't make something better out of the materials at hand. He learns to shudder at normal sexual pleasure and yet gets a kick out of being a slave to ecstatic emotions that twist his whole conception of reality Where there is a weak point in his social set-up, he creates artificial illusions and taboos as a sort of sauder to strengthen the weak place He never studies the situation with open mind to see if the thing couldn't be put together in a way that the very weaknesses would be a source of strength He keeps himself locked up in a dark room He considers his own salvation as infinitely important in the universal scheme Although he may not be exactly selfish, he is damnably self-satisfied When things go wrong he has a righteous satisfaction that his creator is testing him or something It is these people who stand in the way of the race's progress They champion the things that render society putrid They aid the forces of annihilation They stand in the way of the race's conquest of the universe. Slums, prostitution, superstition, war, are a few of the nice little things that the conscientious Christian has, all unwittingly, of course, defended

9 The doctor put his hairy arm about her soft, virginal shoulders and said "Don't worry about God's existence, sister You are a sick girl, and God can take care of himself until you make yourself well" Her mental disorder was a consequence of two factors Her promiscuous copulation with campus princes, and the

philosophy professor's wild-cat teaching Yet she is more interesting than a dozen well-balanced girls, and the professor transforms drab common sense into scintillating meta-sense which is nonsense to the uninitiated Are such as we, the crazy dame, the brilliant prof and I an emergence of a higher type, or merely an abnormal deviation from the present type? Perhaps both We posit a better society whose judgments would be more profound We posit a society which would approve our deviation from present norms Perhaps in that order we could be more normal, but it would be a sell-out to become normal for the present order of society

Excerpts Illustrating the Category of Direction

This category will be illustrated in terms of the dimension of Direction in which values proceed. It may be said that, in general, during the first phase values could be bestowed upon the self from without, or might be given to the outer world by the self, and the same double relationship held true in the third phase In the second phase almost all values were thought to proceed from the self Excerpt 2, given above, illustrates a value bestowed from without in the first phase Excerpt 4 illustrates repudiation of a possible outer value in the second phase Excerpts 10 and 11 indicate bestowal by the self at about the beginning of the second phase. Excerpts 12 and 13 indicate the radical egoism of the middle of the second phase Excerpt 14 indicates radical egoism in the third phase, but 15 shows that by this time the subject could admit that much of his own value had been received from his biological and cultural heritage.

10 An Egyptian then spoke up and said that they believed in that sort of thing in Egypt When Mrs. Brown asked if it had a spiritual significance he said that the significance was functional He said that in Egypt it was good strategy to deify the state and its head at all costs (I realized why at once Egypt had a special case, it is mere defense against Britain) And Mrs B said that Egypt must be imperialistic, he said no, that it is anti-imperialistic I remarked to Mrs B that it was a case of Nationalism versus Imperialism She caught on

11 I suggested in class to Mr Perry that the *Morte D'Arthur* as a record of a people's gradual ethical advancement was better, in many respects, than the Bible The class acted odd about that viewpoint, but Mr Perry was interested in considering the *Morte* from that standpoint To me the chivalric ideal, conceived not in Galahad's sense of striving not to slip on banana peels, but as a question of positive taste, is the *ne plus ultra* in ethics

12. I am my God

13 I am the comet and the universe is my tail

14 Just as I thought, Trudy loves me She acts like an over-affable pup. Also this afternoon Betty came along while I was working in a library alcove and asked for a cigarette So we puffed one apiece there as the student assistants would hardly question anything that I might do while Scrooge was out Remarking on a

philosophical issue I said "most of us never get beyond the superficialities anyway" She replied, "We hardly could in a library alcove" But it's just the same with Ethel When I am afire with ideas she knows that she will get no crumbs of emotional bread from the table of my personality

15 Betty told an uproariously funny story about how Krause had informed her concerning me, and how, despite all my radicalism, I am an aristocrat by blood and social heritage It was well, if pompously said, Herr Baron, and it took another such to remember it

It must be admitted that 10 and 11, excerpts from one of the transition periods, are not unambiguous No categorial-dimensional scheme can depict a personal world perfectly as regards every characteristic. Yet we are more confident of some categorizations in a given case than of others.

Excerpts Illustrating the Category of Value

We shall illustrate two dimensions under the category of Value This personal world stands high on both during all three phases These are the dimensions of power values and dramatic values. Excerpts 16, 17, and 18 will illustrate the stress upon power values in the first to third phases, respectively. Excerpts 19 and 20 will illustrate the stress upon dramatic values in the first phase; 21 and 22, upon dramatic values in the second, and 23 and 24, upon dramatic values in the third.

16 Now since this planned activity of man is his glory as it were, any chap who lets comparatively simple chemical forces (as the primary sex drive no doubt consists of), any person who lets these bring him down out of control in a side slip as it were seems rather inane But if so-called "improper" sexual activities would help a fellow achieve some given end, such as financial or political, why they would be just the correct thing to do from the standpoint of that reasoning

17 Marx is rather hazy, rather inconsistent when he talks of the producers of value being exploited There is no such thing as exploitation A man owns what he can get, no matter who produced it But when Marx points out the fact that capitalism will itself lead to its own potential doom by bringing forth a discontented proletarian majority, and concentrating them about vital industrial centers, then he is talking sense He now talks in terms of potential force He gives us something to plan on

18 Nineteenth century materialism absolutized structure, and these passionless twentieth century boys do the same for function A means to a means to a means But intelligence hourly calls into being and again blanks both factors The intelligible unity that is me has structural and functional aspects For science these are patterns of discrete atoms, in the first case, and events in the second But there are no purely empirical discreta, apart from reference to some human value And the unity that is me is something other than an infinity of artificial facts I know this unity as mood Passion and ideation are abstractions from it and their discrete contents are as relative as those of the outer world No means—man could tell

whether man X had become saner or environment Y more pathological   There is
no progress apart from relation to mood enhancement. Mood yearns for mood
To become another mood that comprehends the first and yet more   Towards the
ideational and passional nth degree of mood across the limit from the human
Mood's power is transmitted across into another through appealing particulars
And that is why if machine-models best serve structure-thinking, and mathematical
symbols serve function-thinking best, art itself will serve, but not replace, integral
thinking   Now I know my passion beyond all utility   Now I shall cease polemics.
And when the time is ripe I shall be generous with my enhanced mood, and with
its awful power

19 The Canadians are a damned fine people   There were Highlanders, Irish
Kilties, Dragoons and Naval Cadets in the parade tonight

20 I made a rope of several sheets but a Soph grabbed it from the floor below
and tied it into a room in such a way that he thought no one would have the nerve
to climb down from the third floor   But I did   Fighting on the second floor.
.   A few Sophs are in the hospital today

21. Tallantyre, that gigantic Irish rebel, ended his eloquent talk with a Shelley
quotation containing the line   "For we are many, and they are few"   That is the
cold, ungallant passion, the romantic realism of our cause   Avid for the inevitable.

22 The president of our university graciously received our anti-chapel com-
mittee, and had us seated around the long mahogany desk in the Sanctum
Sanctorum of the administration building   He then gave a very diplomatic talk,
suggesting a compromise   I replied that what he said was very reasonable, then
he beamed on me   But I continued to the effect that our struggle was not simply
a question of reasonably handling a local situation on the campus   Then the
atmosphere darkened, and the fight had begun

23 Gloria really has an arisitocratic nose   Dark hair and eyes, and a strong, yet
tender face, like a Medieval saint. And that adds to the sensual appeal of her ripe
young body   But what a voice, so insinuating, yet so inviolable   She should be
locked in a room and raped by Great Dane dogs which had been especially trained
for that purpose   That might shatter her false sense of security

24 Bill, Orville and I to the football game tonight   A London fog over the field
Our team's helmets have white dots on them   The dots form a circle, flow out
into a line, advance in strange groups, peculiar onrushing patterns, changing pattern
as they come, until, suddenly become chaotic, they disintegrate   Static order changes
to organic rhythm, then, sharply, violently, the rhythm is killed   Another view-
point· The fog of the field corner, there the lines are drawn up, just beyond vision's
penetrating range   Soon strange malignant figures loom forward from out the
murk   Then one of the figures dances crazily, brokenly   His movements become
distorted, become sickening contortions   Orville sensed the horror of it, too   The
"fleetingness," as he called it   The fog depersonalized the game and so made it
possible to see the game as a living symbol of our deepest personal hopes and fears.

Excerpts Illustrating the Category of Causation

Under the category of Causation we will illustrate the dimension
which passes from mechanical determinism to teleology.   In the
first two phases our subject interpreted causes mechanically.   In
the third phase he returned to teleological notions which must have

prevailed in his childhood, but, of course, he attempted a rational justification for such teleology as he now admitted Excerpt 25 is from the first phase, 26 is from the second, and 27 from the third. Excerpt 25 is a verse, quoted in the diary during the summer after our subject's graduation from high school He states that it won him a prize in a high school poetry contest.

25 While our home-sphere is careening through black, four dimensioned void
Whirling swiftly down its helix past giant sun and planetoid
Penetrative minds are tracing in world-lines and twisted space
A design that moves our cosmos, every atom finds its place
Must this Nemesis pervading each swelling in the aether-sea,
Every galaxy and system leave such minds forever free?
While design's vast clock-work functions man may laugh and love and play
Heedless of minute ergs' passing till their myriads spell decay

26 When you meet a man who believes in himself and still knows he's a reactant—he's a man Fate means nothing any more than death If you are driven what is its significance to you? Nothing Consider your body as vegetable and let it take care of itself When sleep comes, when death comes you are none the wiser—they mean nothing to you

27 In the beginning was the nebular mood Some might call this a nebulous idea, and so it is, and so is the big idea in the beginning, and it was hidden in a vague cosmic mood Let the assiduous little means-men have their precise ideas· A new universe grew forth from the matrix of a nebular mood, and every new order commences as a big idea, which is necessarily vague. Yes, in the beginning was a mood, and it was nebulous, and our universe took shape in the matrix of this nebulous mood, and the idea was big And the goal is the communion of moods, enhanced within itself, and between and among themselves, and within each, yes, enhanced beyond recognition, and altogether across the limit And from their union, from the enhancement among themselves, must come the big idea for a brave new world, the nebular mood again, but much enhanced This sort of thing, multiplied to infinity at any time, and each infinity progressing among the others through an infinity of times, this sort of thing makes up our cosmic weather, calm or stormy, like it or not And if you don't like it you might as well curl up in some sheltered corner and die But the mood holds forth eternal life for whomever lives courage to grasp and love to desire And woe to them who would lessen desire, woe to the destroying power For every child sometimes feels the mood, but only the well nourished gets the feel again and again, waxing mighty in faith Woe to those who would produce physically, emotionally or culturally undernourished things, for they thereby produce what will turn on them, and annihilate them And it is a whirlpool in our cosmic weather, a whirlpool in the infinite sea, and the mood moves on, enhanced by such ripples, enhanced by infinite ripples and eddies, and yearning towards enhancement

Categories of Form and Change

Of course, the purely formal categories cannot be illustrated by any selected content. The writer's general conclusion from a consideration of the three phases as wholes is that there was more

positive intellectual differentiation between the second and third than between the first and second phases   The personal world in its third phase is by far the more differentiated in its cognitive aspect.   Yet much change also occurred between the first and second phases, but this was more a change in content than in form. Since all phases represent about equal lengths of time, the greater formal change, in the cognitive aspect, between the second and third phases, represents an increased rate of change.

Additional Problems Suggested by the Case

The writer believes that three very definite psychological "complexes" are evident from our subject's expressions in the personal document.   These are: such preoccupation with matters concerning death that we might attribute to our subject a death complex; then there is a protest-complex, perhaps related to his repudiation of his role as clergyman's son, and, finally, there is a guilt complex The death complex finds expression in excerpts 2, 3, 11, 24, 25, 26, and, perhaps, 27.   The protest complex is expressed in excerpts 3, 4, 8, 9, 11, 16, 17, 21, 22, 23   The guilt complex is expressed in excerpts 3, 8, 11, 15, and 16

Some of these characterizations are not evident from the surface contents of the excerpts, but become evident if we regard the surface contents as symbolical.   For example, the interest in the *Morte* may express an interest in death   And such phrases as "slipping on banana peels," "coming down in a side slip," "locked in a dark room," "transmit across into another," and "the idea was big and hidden in a mood" may have erotic significance   At any rate, altogether too large a proportion of our excerpts are significant for one or more of the "complexes" to leave it possible not to suspect symbolic relation in others

Another problem which is inevitably raised by any such personal document concerns its own personal function   We indicated at the beginning of the case that the personal function of this diary was not restricted to communication to some particular reader or to relation with some particular psychological content, nor does any particular attitude, such as boasting, self-justification, self-abnegation, romantic yearning, etc, seem to dominate a significant proportion of the entries   At least this holds true if we regard a certain amount of egoism as rather normal for late adolescence and very early young adulthood in males of rather privileged social

classes   Yet the consistent posing and exaggerating tendency, sometimes related to the ego directly and sometimes not, is rather unusual. We might suppose that the diarist was compensating for a dull everyday life by making colorful comments in the diary. And yet such excerpts as 1, 2, 7, 9, 10, 11, 14, 15, 19, 20, 21, and 22 would seem to indicate that our subject's everyday life was far from dull. Nor was his practical relationship to experienced events merely passive. The contrary is indicated by 7, 10, 11, 20, and 22 It seems to the writer that our discovery that we can rule out any notion that the personal function of the diary writing was a *general* compensation tends to justify our decision to regard the posing as more revealing than otherwise   Doubtless the depth of our subject's contempt, the intensity of his lust, the scope of his intellect, etc., and the eloquence of the speaker, the beauty of one young woman, the madness of another, the exciting character of the "wild cat teaching," the violence of the conflict, the yearning of the mood and much else were greatly exaggerated in his expressions. And yet we need not doubt that he experienced such attitudes and appreciated such qualities in objects   His posing may represent an hereditary trait related to a rather high affectivity   His environments may also have encouraged him in this trend, especially in view of the fact that they were usually rather congenial   He was an only child, and, excepting in the second phase, he himself seemed to regard his broader environments as rather sympathetic in many respects [1]

SUMMARY

Integral phenomenology is the systematic exploration and description of personal worlds

Some personal documents are so inclusive in time, content, and personal function that they may be said to express a personal world

In attempting to infer world-structure from documental expression, the integral phenomenologist checks his preliminary hypotheses by applying the coherence-principle   He proceeds from exploring more inclusive structural connections towards exploring local structures

[1] Long after completing this case study the writer came to the conclusion that any personal world in its affective aspect contains three spheres   an inner sphere of affection-referent objects, a middle sphere of status-referent objects, and an outer sphere of destiny-referent objects   The over-all tendency of our subject is to exaggerate the outmost sphere and minimize the inmost   Hence his adjustment to all three remains immature

Connections in personal significance between expressed contents may be indicated indirectly by their contiguity, their symbolic interpenetration, and their stylistic similarity.

A personal world is not simply a structure· It is a system of processes. A person follows paths to reach objects, explores contexts to find paths, and quests his world of contexts to attain new contexts The most total changes in a personal world are context-changes These are basic to phases in a life quest Phase-contrasts in a life quest, which is composed of the general changes in a personal world, may be expressed in personal documents by an unusual amount of change in content, symbolic usage, and style

Any personal world may be characterized by certain formal, material, and formal-material categories Each category represents a class of dimensions in terms of which different personal worlds may be compared and contrasted In the analysis here presented, the formal categories of Form and Change, the material categories of Value and Causation, and the formal-material categories of Direction, Distance, and Plenitude were used Under each category a number of dimensions was exhibited, and many of these were applied. It was suggested that an infinite number of dimensions might be derived from a few categories, if some of the dimensions really represent an overlapping of categories and dimensions

Any comparison of personal worlds, if based on dimensions which are common to many personal worlds, must be designated as "typological." Other things being equal, the more complex is the dimensional system, the nearer will the consequent typology be to personology.

In the present study, a relatively adequate document was taken as a basis for categorizing three personal worlds which, however, were simply different phases in the same quest. Although only general principles and first steps in method were suggested in this study, and although only the one case was used for illustrative analysis, we are justified in concluding that integral phenomenology shows definite promise in the field of document analysis. That promise resides in the combination of synoptic and critical outlook and method which was demonstrated through our detailed illustration

REVIEWS

DEVELOPMENT IN ADOLESCENCE   APPROACHES TO THE STUDY OF THE INDIVIDUAL
By Harold E Jones, assisted by the Staff of the Adolescent Growth Study,
Institute of Child Welfare, University of California   New York Appleton-
Century, 1943   Pp xx + 166

To the small but growing literature of intensive case studies the Adolescent
Growth Study at Berkeley here makes its first contribution   The book, in spite
of its capacious title, deals with the single case of John Sanders, a youth who was
under psychological scrutiny from the sixth grade up to his entrance into college
It is offered as "a teaching vehicle—to illustrate method and to present specific
growth phenomena concretely rather than abstractly," and as "a source of ques-
tions rather than of general conclusion"   The selection of John Sanders from
amongst his 200 equally well-studied classmates was dictated by the fact that his
case presents, "in somewhat sharpened form, a number of problems which are
of common occurrence in contemporary urban culture"   In many respects handi-
capped, at least as a competitor for adolescent social esteem, John endured a series
of painful social frustrations, but in the end achieved a reasonably effective adjust-
ment   "One cannot help being impressed," Jones declares, "by the complexity of
problems which can be faced and even to some extent surmounted within a social
structure that has done little to provide sympathetic support or understanding"

The case is not, however, presented in historical order, but rather as a series
of diagnostic procedures most of which were applied repeatedly over the whole
seven years during which John was studied   Background is provided by two
introductory chapters in which we are shown the middle-class neighborhood, the
quiet father discouraged by financial reverses, the gaunt, dominant mother, and
a very brief glimpse of John's early development under his mother's cool, fussy
supervision, then a picture of the schools and the early stages of John's progressive
difficulty in achieving social adaptation   Some use is made of teachers' reports
which, insofar as they agree at all, describe a relatively unpopular, independent
boy, poor in spelling, grammar, and arithmetic, somewhat gifted in creative
writing, curious and so stubborn with questions that certain teachers deplore his
serious-mindedness   This material, however, is preliminary to the special diagnostic
procedures from which the more exact, less impressionistic data of the Growth
Study are derived

Foremost of these, claiming more than 10 per cent of the entire report, is the
Reputation Test (discussed in detail elsewhere by C M Tryon), an ingenious
method of discovering each year by a sort of ballot "what John's fellow pupils
thought of him as compared with others of the same grade level"   This is aug-
mented by a questionnaire on best friends which permits the construction of
"sociograms" revealing groups, cliques, pairs, and isolates from year to year
Furthermore, semi-annual visits to the Institute, and club-houses opened by the
Study in the junior and senior high schools, gave the staff a chance to make
ratings on various aspects of social behavior   The thoroughness and richness of
the observations of social behavior are an outstanding merit of the book   John's

deviation in physical development was recorded in measures of growth, skeletal maturing, basal metabolism, and the like   Motor abilities were measured with great care and detail, and mental abilities were assessed by an array of standard intelligence tests, to which were added some promising experimental learning situations   Interests and attitudes were tapped by a questionnaire on "things you talk about," an interest record, and an opinion ballot   A chapter is devoted to "underlying tendencies"—tendencies which Jones views with suspicion, surrounding the phrase with a cordon of quotation marks   Particularly valuable in this section is the analysis of drive-patterns according to a technique developed by E Frenkel-Brunswik, tendencies and wishes not expressed in overt behavior, often very different from what is expressed, come to light by this method of analysis   Less complete and satisfactory are the reports on the Thematic Apperception Test, a voice record, the Rorschach Test, and emotional reactivity as measured by the galvanic skin response   The list of techniques is completed by an extensive per-sonal-social inventory covering such matters as aspirations, deficiencies, attitudes toward school, family relationships, etc   Mention is made of interviews, but almost no material from them is included in the report

From these varied sources of information we get the following account of John Sanders   Slender, awkward, and unattractive, poor in strength and athletic ability, a little obtuse in social relations, he is already in the sixth grade a some-what unpopular boy who receives less than average esteem from his companions His troubles are then multiplied by a delay in the onset of puberty and of the adolescent spurt in growth, his basal metabolism simultaneously running much below its previous average   For a year or two he is still a little boy while his friends are growing up, he becomes a "fringer" in groups, and occasionally an object of ridicule   It is observed, however, that he persists in frequenting the club-house and other centers of group activity, forcing himself at least as far as the fringes, and that an attitude of increased rebellion against his parents sets in at about the usual time   Meanwhile he does good school work in literature, history, and geography, and enjoys serious discussion, his mental performance is well above average when he is not hurried by time or pressed by demands for pre-cision   In due time his physical growth catches up with the group, and although he does not become socially popular he begins to find congenial companionship with small groups of students who value intellectual pursuits   This upturn in his fortunes continues into the college years, which "brought a successful record in courses and in an enterprising variety of outside activities"   The favorable out-come was as Jones puts it, "due partly to changes in John as he laboriously caught up with the group, but we must give credit also to changes in the group as they caught up with John, and as their values and standards of achievement came closer to the sober aspirations which John had always held important"

Let us now see how Jones in his concluding chapter draws this material together and makes it ask significant questions   From the "complex federation of factors" which determined the fall and rise of the boy's personal welfare, he selects for initial mention the delay in growth and bodily maturity which occasioned, in "the competitive adolescent culture," a loss of status with others and a possible undermining of personal security   Next he points out the predominant ectomorphy of John's physique and shows that much, though not all, of his behavior can be ordered to the temperamental component, cerebrotonia, recently proposed by Sheldon   To economic pressure is assigned a rather diffuse influence over John's development   The problem of escaping from the "overprotective attitudes" and "self-centered demands" of the mother is pointed out as another possibly significant

factor Lastly, there is a return to the physical factor, the lack of the athletic ability and strength that is so much prized by adolescents

That is all Jones makes no attempt to weigh these factors, to determine their particular contributions, or even to squeeze them for important questions that might be answered by future research "The concluding chapter," he warns us in the preface, "deals primarily with interrelationships basic to construction of 'the individual as a whole', however, since any such interpretation must include a fair amount of conjecture, the reader whose interests lie in this field is for the most part left free to develop his own hypotheses" This freedom is certainly misplaced in a study from which, in the interests of anonymity, "we have found it necessary to exclude a large amount of recorded personal data" In its stead this reviewer would have welcomed a weighting of factors and a most likely interpretation of the case as a whole, arrived at after discussion and mutual criticism by all members of the staff But if it is necessary to be content with a mere pointing-out of important interrelationships, we can still justly demand that what is pointed out should be theoretically capable of explaining the outstanding features of the case

Nothing in Jones's enumeration explains John's constructive activities None of the mentioned factors lead us to suppose that John is rapidly becoming a well-adjusted college student rather than a schizophrenic or an eccentric isolate John has an overprotective, self-centered mother, but although he is somewhat dependent he is also very strong in the drive for autonomy Whence this autonomy? John is rejected and even humiliated by the social group, but he continues to seek recognition and to strive for social skills Whence this persistence and this shunning of pathways to escape? John is serious-minded, reading and arguing about the world and its problems, he is ambitious to make something of himself Whence these sober aspirations? Significant questions fairly burst from this account of a developing personality But Jones sets it all down to "the toughness of the human organism"—and no questions asked.

Serious shortcomings in the data lie behind this curious unwillingness to investigate constructive behavior The material on social behavior, to be sure, with the annual testing and the constant reference to norms, sets a standard at which future studies of personality should aim The material on family relationships, on the other hand, falls distinctly below the line which separates scientific data from guesswork Did the mother give rewards of praise for good school work? Did the father encourage the serious intentions? Were there conditions at home which, even though not wholly satisfactory, conferred a basic sense of security? The material does not seem to be equal to these and other urgent questions Another grave weakness is the lack of interview data, John is practically never allowed to speak for himself, except through questionnaires Perhaps it is the interviews that have been excluded, but at all events we can only regretfully imagine how much better the case might be understood, how much more unity might be perceived in it, how much knowledge might be gained about the toughness of the human organism, if we but knew what John said about himself when talking with a trusted adult who had become a friend Even when his growth was most retarded, his basal metabolism at its lowest, and his social rejection most acute, did John have sources of interest and satisfaction in his private life? Did he feel rewarded by things that he did or made or read, and did he find strength in secret plans and aspirations? Unfortunately, these matters remain secret

ROBERT W WHITE

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THE DIARY OF MICHAEL FLOY JR   Bowery Village 1833–1837   Edited by Richard
    Albert Edward Brooks, with an introductory note, annotations and postscript by
    Margaret Floy Washburn   New Haven   Yale University Press, 1941   Pp xi+
    269   $5 00

In 1833, when he was twenty-five years old, Michael Floy Jr, Columbia graduate,
nurseryman in the family business, began his daily record of the most important
transactions of his life as related to his spiritual and temporal concerns   Many
years later, his sister's granddaughter, Margaret Floy Washburn, opened his diary
to find good reading for historians and psychologists, and other more leisurely
persons   She pruned it and annotated it from family history and public sources
of the period   Since her death, her colleague, Richard Brooks, of the Vassar
Department of English, has edited it for publication with skill and understanding

A hundred years ago a good young American could feel easy about escaping
muster-day if he or his father could fix things so   And, in general, one in Michael
Floy's station could lead a life of enterprise fairly free from outward direction
This is only the beginning of anyone's easy long list of differences between his
time and ours   Without detailing them, it is safe to assume that if Michael Floy
had lived in the 1940's, both the outer and the inner man would have been different.
He was, in his own words about a less admirable man, "an ardent soul," and,
without losing his bearings, he responded whole-heartedly to persons and events
in the world's history   Moreover he rated knowledge above all earthly goods   In
his mathematical cogitations he was, as the editor remarks, ahead of some of the
orthodox professionals of his day   He mastered sections of the natural sciences,
and he checked his reading in psychology against the testimony of his own experi-
ence   The twentieth century would have rid him of some of his preoccupations
and anxieties   It might also have changed somewhat his emotional nature, however
distinctive and fixed it looks in the *Diary*, for a man of his parts would today find
other techniques than those of Methodism for exploring and managing himself
But for all of the differences in the lot of young men, Michael Floy's *Diary* can
add to our insights and quicken our concern today   There are not many docu-
ments that show, so at first hand, how complex and many-sided a sensitive, intelli-
gent, and righted-minded young person is, how varied and urgent his needs
Michael was, as he himself said, given to careful consideration of himself and his
transactions, and he could report intelligently   For the student who is beginning
the study of personality the *Diary* offers a nice exercise in the use of his psycho-
logical terms and concepts   He may detect a cycloid temperament, and perhaps
some samples of obsessive and compulsive thinking, and of needs nurtance and
succurance   He can speculate, if he is not too reticent, about why Maria's simple
words, "It is just as you say," made Michael love her forevermore   And if he falls
into habits of easy and empty labeling, Michael's own words may hold him in
check. this diarist was impatient enough with the "slang of the genteel learned,"
wherever he met it—at a Columbia Commencement, in the pulpits of Bowery
Village, or in famous writings

Much of Michael's life, by the time that he was twenty-five, was clear, settled
going. He was pretty sure that his worldly business would be his father's garden-
ing, which suited his tastes and aptitudes   It was the source of many of his satis-
factions and much of his enjoyment   He reported the "exquisite pleasure in
budding good trees," the feeling of importance when budding a plum; and he
wrote that "a king might envy him" the happiness and peace, the gustatory delights
of a work day in Harlaem   His "still great desire to do much good" found at
least partial outlet in the benefit society he organized for the poor of Bowery

Village He was not a political man, but he had made up his mind on many matters he was thankful for the "people's triumph" in Van Buren's election, he knew "God's will" about emancipation and joined an anti-slavery society Mathematics had taken hold of him before he knew it It "pestered" him and "bewitched" him, but it stood him in good stead in many ways, and he must have liked to consider himself "the smartest calculator in the United States until a smarter can be found " He knew, in spite of some apprehension and several alarms, what he wanted in marriage, and, before he closed his diary, he had found his wife Pages of the *Diary* were given over to reporting the delights of wide reading In short, one might say without naming them all that Michael's temporal transactions added up to what makes the good life

But there were many areas of experience in which this able young man felt his own insufficiency and need for direction and sustenance He found enough to cause sorrow to "a person of benevolent feelings" in the world's deliberate falsehoods, its ingratitude, its contempt for poverty and sickness Oftener it was his personal concerns and doings that were too much for him singlehanded He was familiar with dark shifts of moods, descents from overpowering happiness to keen despondency, worry over nothing that put him into a sweat and robbed him of his resolution, "low, grovelling ideas of death " He found such lack of moderation in the behavior that seemed to ease the inner tension that he could not see in what respects he sometimes differed "from a person that is called foolish " The tinder-like nature of his heart brought him "much suffering on account of the females", and in one instance he had said so much to a miss from Poughkeepsie that he must place his hope in God to extricate him His incurable salt-rheum had given him "pain, anguish and disgust" for twenty years, and he was afraid that his children might bear the taint He was, in his twenty-eighth year, a " poor, bashful, stammering fellow" whom God must inform in advance if he was to be called on in meeting It must have been such troubles, as well as his cogitations, that made him put down the words "I am not a free moral agent nor do I wish to be one "

His religious conversion at twenty had been like many others He described five years later the compulsion and abrupt onset of the emotion, its somatic and hallucinatory components, and the ensuing week of "being as it were lost in thought, feeling like a little child in every respect, helpless, innocent, docile, without guile " He did not forget to note in his *Diary* that he had been led to the meeting by a young, intelligent, beautiful woman, doubly interesting for her simple dress and downcast eyes, for whom he had worked himself into a passion But he did not at twenty-five doubt that the work of the converting grace in him had been real you might as well say he was mistaken in his outward senses when he called sugar sweet or sandpaper rough

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THE PSYCHIATRIC NOVELS OF OLIVER WENDELL HOLMES Abridgment, Introduction and Annotations by Clarence P Oberndorf, M D New York Columbia University Press, 1943 Pp viii+268 $3 00

The *raison d'etre* of this book is its author's convictions that Oliver Wendell Holmes anticipated in many respects the teachings of Sigmund Freud In 1871, Holmes delivered before the Phi Beta Kappa Society of Harvard an address entitled "Mechanism in Thought and Morals" Concerning this address Oberndorf writes

It was carefully revised, expanded, and annotated before it was printed in *Pages from an Old Volume of Life* So far as I can determine, it has lain there unnoticed I find no reference to it in accounts of Holmes' contributions to medicine However, Van Wyck Brooks in *The Flowering of New England*   states that this essay of Holmes "was a brilliant anticipation of Dr Freud"   The Phi Beta Kappa address was considered notable by contemporaries for two reasons namely, that in the brain there persists a material record of thought, and secondly that this transmissible record is not at all times available to the person for the control of his actions (pp 7–8)

In this essay Oberndorf finds evidence that Holmes resembled Freud not only in his general notion of an active unconscious, but also in some of his more specific interpretations—in his recognition, for example, of the workings of the unconscious in free association, dreams, dual personality, repression, and adult maladjustments traceable to infantile experiences Stressing the point that Holmes thought of the unconscious as dynamic, Oberndorf writes

> Holmes not only appreciated the constant and restless activity of the unconscious but also that from the unconscious came those urgent drives which ruthlessly thrust aside our more deliberate thoughts and planning, as well as those persistent affect-laden urges that lend conviction and power to our expressed thoughts, choices and opinions (p 9)

Having discovered Holmes' essay, Oberndorf turned to Holmes' novels In *Elsie Venner, The Guardian Angel,* and *A Mortal Antipathy,* he found studies of neuroses which he considered sufficiently important to warrant the re-publication of the novels in abridged form in a single book In abridging the novels he threw "intentional emphasis" on the psychiatric portions Furthermore, in working on his condensations, he found many passages so penetrating in their psychiatric insight that he could not refrain from commenting on them in notes At the insistence of his friends, he published his notes along with the text, hoping thereby to make the books useful in medical schools and schools of social work, either as an introduction to psychiatry or as collateral reading to psychiatric textbooks Accordingly, each novel is both preceded and followed by several pages of interpretative comment and each is liberally supplied with footnotes

The footnotes are remarkable for the speed and consistency with which they direct attention *away* from the text—*away,* that is, from the characters and situ- ations of the novel, and *toward* the problems and practices of psychiatry Perhaps no one should be surprised that a psychiatrist turns so promptly to psychiatry, but there is an arresting quaintness in the abruptness of some of the transitions from Holmes' fictional narrative to Oberndorf's factual exposition of what every young medical student should know

For example, in *A Mortal Antipathy,* the hero, almost dying of typhoid fever says

> I commit the secret of my life to your charge My whole story is told in a paper in that desk If I die, let the story be known, it will show that I was—human—and save my memory from reproach (p 226)

The footnote on this passage reads

> Some psychiatrists are inclined to attribute the improvement observed in depressed and schizoid persons after intense shocks produced by insulin, metrazol, electricity and the like, to a death threat The patient is for a very short time near death or momentarily dead Such a threat of death possibly mobilizes the patient's energy and at the same time makes it free for its rearrangement and redistribution This fluid energy can then be employed in weakening or changing the direction of fixed currents of thought which have previously sustained the patient's abnormal mental trends (p 226)

Usually the footnotes are longer than this and often they are more digressive And even when they bear more directly on the text, they seem not really centered on the person to whom they refer. The point seems less to understand the character

as a particular human being than to interpret him by finding the categories to which his actions belong and thus to place him in the appropriate scientific context This centrifugal treatment is applied to a passage in *The Guardian Angel* in which the heroine, having just cut off her hair and dressed as a boy, is about to climb out of a window, escape to the river, and alone in her boat, row away under cover of the night Concerning this passage the footnote states

> From a remark concerning Myrtle's resemblance to her father and from her assumption of boy's attire in the flight from home, we gather an indication that Holmes may have considered these evidences of masculinity as due to characteristics directly inherited from her adventuresome male ancestors It is more likely, however, that Myrtle had identified herself with boys and this may have been reinforced by a subsequent identification with Deborah Sampson, the Revolutionary patriot

> Wearing boy's clothes in the case of Myrtle could hardly be regarded as a compulsion to adopt the apparel of the opposite sex Such a compulsion is sometimes the presenting symptom in certain mental aberrations It is called transvestitism and affects both sexes In the case of Myrtle the disguise may be considered as an easy way to avoid detection Nevertheless the fact that she cut her hair and chose to wear boy's apparel would indicate that she felt a dissatisfaction with her own role in life Possibly this was a reaction-formation to the cold and austere women in her household (pp 144–145)

All this, however, is only an indication that, for Oberndorf's purposes, the novels are important not in and by themselves, but as illustrations and evidence of something not themselves ' One wonders whether his incidental purpose, which is to instruct, might not have been better accomplished by using better novels—novels in which the main characters are less like dissections and more like full-bodied human beings, and in which the situations are less patently contrived But perhaps there is pedagogic virtue in the very defects of Holmes' novels, for some purposes a skeleton is a better instructional device than a whole living body of which a skeleton is (by inference) an invisible part Not that there are no real people in the novels of Holmes Some of the minor characters, particularly the doctors and clergymen, have a convincing human quality that the main characters lack And Holmes has a way of presenting them with witty condensation He speaks, for example, of

> a trained rector who read the services with such ventral depth of utterance and irreduplication of the irresonant letter that his own mother would not have known him for her son if the good woman had not ironed his surplice with her own hands (p 31)

But whatever the value of the novels as pedagogical materials, there can be little doubt that they are peculiarly, even perversely, appropriate to Oberndorf's central purpose For his main task, it must not be forgotten, is to reveal the psychiatric thinking expressed in Holmes' novels as distinctly in advance of the period in which it occurred And for this purpose the weaknesses of the books as novels increase their strength as evidence Among these weaknesses must be reckoned Holmes' habit, in itself engaging, of holding up the story to express his own opinions. Another is the synthetic nature of his heroes and heroines Instead of working from actual people, he constructs his main characters to suit his psychological thesis—and there is rarely enough flesh-and-blood individuality in the character he creates to cover the bony framework of the thesis it illustrates No X-ray is needed to see the psychological principles Holmes presents, and it is precisely because he is concerned with principles as such, that his novels can be used as evidence of scientific achievement For the ability to sense human nature truly and to work with it effectively does not in and by itself imply a knowledge of the abstract and general principles involved Not even the creation of an impressively convincing fictitious character is a guarantee that the author is familiar

with the basic principles his masterpiece may illustrate brilliantly Only when the bare structure of essential relationships has been isolated is the goal of science achieved

Fortunately Holmes indulged in explicit statements That he recognized the profound importance of the unconscious is almost as plain from the direct, though incidental, assertions in his novels, as from the systematic elaboration of the topic in his Phi Beta Kappa address But to what extent he anticipated the specific teachings of Freud is, in the reviewer's opinion, a matter impossible to decide To anyone acquainted with Freud's writings, it is notoriously easy to detect a Freudian significance in discussions and portrayals of human nature, and it is only a step— but a step for which the evidence is all too often lacking—to attribute to the author of the discussion or portrayal an interpretation which was in fact suggested to the reader by his own knowledge of Freud Sometimes, to be sure, the risk of mis-interpretation is slight In *The Guardian Angel,* for example, Holmes says

> it may well be that the state we call insanity is not always an unalloyed evil It may take the place of something worse—the wretchedness of a mind not yet dethroned, but subject to the interference of another mind governed by laws alien and hostile to its own Insanity may perhaps be the only palliative left to nature in this extremity (pp 138-139)

Only the most hardened skeptic would doubt Oberndorf's interpretation of this passage as a recognition of the defensive nature of mental abnormalities But at other times the chances are by no means negligible that one may read into a passage a meaning the author himself never entertained In *Elsie Venner* there is a long paragraph that begins

The woman a man loves is always his own daughter (p 77)

It is not surprising that the corresponding footnote speaks of "a hint of the incest fantasy" Yet a careful reading of the context gives this interpretation no support in the text itself Holmes merely seems to be saying, by means of a figure of speech, that the woman a man loves is largely his own creation, that he sees her through the ideal gradually produced in his imagination by the intricate and unconscious workings of his own deeper self This is in itself an interesting recognition of the role of the unconscious But whether Holmes actually had in mind the relationship now called the Oedipus complex, or whether his choice of a metaphor was determined by an unconscious awareness of such a complex, or whether his formulation was prompted by such a complex in himself, is in the reviewer's opinion open to anyone's conjecture

Such reflections raise a question at least as interesting and profitable as that of the extent to which Holmes anticipated Freud Why not study Holmes inde-pendently as the independent thinker he was? Surely the observations and reflec-tions of so able and penetrating a man are significant on their own account It might be rewarding to reconstruct as literally and cautiously as possible just what Holmes, in his own pre-Freudian *milieu,* worked out about the human unconscious To clear his views of the Freudian interpretations so strongly suggested by the culture-of today would require a difficult but not wholly impossible feat of detach-ment If such a study were made, a more fruitful comparison with Freud might ensue At least it seems possible that fewer insights would be lost, and fewer distorted, if, instead of studying Holmes from Freud's point of view, the conclusions of the two independent observers and thinkers were brought together for com-parison, contrast, and evaluation

But this review must not end on a note of mere possibility After all, it is

concerned with a solid actuality—with Oberndorf's discovery that Holmes, working in complete independence of Freud, sought and found explanations of human conduct in the same hidden regions of the personality that gave Freud the clues to his revolutionary theories

EDNA HEIDBREDER

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ENCYCLOPEDIA OF CHILD GUIDANCE Edited by Ralph B Winn New York The Philosophical Library, 1943 Pp xvi+456

To review an encyclopedia properly would demand an encyclopedic knowledge on the part of the reviewer as well as a very extensive allotment of publication space Lacking the former and in the face of a national paper shortage, I can only touch upon a few of the leading features of this volume

The table of contents lists a total of 214 topics by 74 authors Some idea of the range of material covered is indicated by the following sample obtained by taking each twentieth title in order Ability, Appetite, Child Delinquency, Crying, Eidetic Imagery, Gifted Child, Juvenile Delinquency, Near-Sightedness, Problem Tendencies, Rhythm, Thumb-sucking As for the authors, examination of the brief biographical sketches in the list of contributors shows that 14 hold the M D degree, and 47 the Ph D , of these, 3 hold both the M D and the Ph D Eleven received their graduate training in a foreign university According to the 1943 *Yearbook*, 23 of the contributors are members of the American Psychological Association, 26 are associates, and 25 are nonmembers

As is inevitable in a compilation of this kind, the contributions vary greatly in length, in clearness, and in informational content For example, the section on Crippled Children (unsigned) consists only of a 20-line (single-column) paragraph that includes little factual data of significance In contrast, the article on Deafness by Fritz and Grace Heider covers 4½ pages and presents a concise and well-organized over-view of the entire topic The 19 appended references show a good proportional balance between the scientific and the practical aspects of the question

Just what class of readers the *Encyclopedia* is designed to serve is not clear The discussions, on the whole, are written at a decidedly elementary level and include little with which the trained clinician is not already familiar But from the standpoint of its use by teachers, parents, social workers, or others with similar background, its value is distinctly limited by the absence of a comprehensive index which leaves the reader completely at the mercy of the particular vocabulary used in the table of contents, as well as by the apparent omission of many topics likely to be of special interest to those seeking practical information The editor states in the preface (p v) that he alone is responsible for the selection of entries He does not indicate the principle by which he was guided in making his selection and this is not immediately apparent to the reviewer There is no mention of such important clinical problems as encephalitis, chorea, or cerebral palsy although almost two pages are devoted to the purely neurological aspects of Chronaxy—admittedly an important topic but as here treated one that has only indirect bearing on child guidance There are also brief sections on Aphasia, which is rare in childhood, on Eidetic Imagery, and almost two pages on the highly apocryphal topic of Feral Childhood There is a section on Lying but none on Stealing In the thought that this apparent omission might be a matter of vocabulary I looked vainly for all the synonymous terms that occurred to me Theft, Property Rights, Dishonesty, all were missing Inasmuch as stealing is by far the most frequent offense for which children are brought to court I then looked up the short paragraph on

Juvenile Delinquency Stealing is not mentioned but there is a cross-reference to the section on Child Delinquency which likewise yielded nothing Perhaps the subject is treated somewhere in the book but if so I was unable to locate it

With the interests of the practical worker still in mind, I then decided to see what the teacher who recently sought my advice about one of her pupils would have learned had she consulted the *Encyclopedia* instead The child in question, a boy of thirteen, had recently become very restless, hyperactive, and hard to control Later medical examination revealed that he was suffering from an incipient attack of chorea There is no section on chorea Neither is there any topic headed Nervousness, Hyperactivity, Restlessness, or Activity I suspect that the teacher would have given up at this point but in view of her further complaint about the child's non-conformity to rules I turned to the table of contents again for possible data on this topic Nothing appears under the heads of Rebellion, Resistance, or Carelessness but there is a section on Obedience The 17 lines tell us that as children grow older, fewer demands for rigid obedience should be made There are cross-references to Conformity and Discipline The two pages on Conformity present an excellent condensed account of the manner in which the child's behavior and attitudes are shaped by the general social environment, while the 1½ pages devoted to Discipline deal almost entirely with the training of children under the age of three years Here we have a further example of an important defect that, as I have elsewhere pointed out, is almost inevitable in the multiple-authored volume As a result of lack of coordination among authors, both unfortunate gaps and unnecessary repetitions usually appear

Sometimes, however, the searcher for information will be better rewarded Although space does not permit the citation of all the articles of real merit, the section on Nursery Schools by Helen Koch, that on Feeding Problems by Wm Sadler, and the well-organized discussion of Parent-Child Relationships by P M Symonds deserve special mention Nevertheless, examination of the book as a whole raises a very definite question What special advantage is to be found in the presentation of data in the form of brief and unrelated summaries as compared to the systematic and orderly account of the same processes and principles described in their total setting as is done in a comprehensive text? The special claims usually made for an encyclopedia are three authoritativeness, since each article is presumably written by a specialist in that field, comprehensiveness, and convenience of reference In the present instance I cannot see that any of these hold The field presumably covered is relatively narrow, and few if any of the topics are treated in so technical a manner as to fall outside the capacity of any competent clinical psychologist As for comprehensiveness, the present volume with its 214 topics certainly cannot compare with, for example, Kanner's *Child Psychiatry* of which the subject index includes more than a thousand items A sample of six comparatively elementary texts taken at random from my shelves listed from 224 to 380 topics in their indexes. Neither can the claim be made that this *Encyclopedia* presents its information in a form that is more convenient to locate In the absence of an index to supplement the table of contents the contrary is true.

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NEW BOOKS RECEIVED

ANDERSON, DEWEY, AND DAVIDSON, PERCY E *Ballots and the democratic class struggle* Stanford University Stanford University Press, 1943 Pp xiii+377 Price $4 00

GLUECK, SHELDON AND ELEANOR *Criminal careers in retrospect* New York The Commonwealth Fund, 1943 Pp xiv+380 Price $3 50

LANGER, WALTER C *Psychology and human living* New York Appleton-Century, 1943 Pp vii+286

MEIER, NORMAN C *Military psychology* New York Harper, 1943 Pp xx+395 Price $3 00

RECKLESS, WALTER C *The etiology of delinquent and criminal behavior* New York Social Science Research Council, 23 0 Park Avenue, 1943 Pp xii+169 Price $1 50

SCHULER, EDGAR A *Survey of radio listeners in Louisiana* Baton Rouge General Extension Division, Louisiana State University, 1943 Pp 77 Price $0 50

WINN, RALPH B (Ed) *Encyclopedia of child guidance* New York The Philosophical Library, 1943 Pp xvi+456 Price $7 50

The Journal of Abnormal

and

Social Psychology

MULTIPLE PERSONALITY

BY W S TAYLOR

Smith College

AND

MABEL F MARTIN

Peru State Teachers College, Peru, Nebraska

Morton Prince, who founded this Journal, made much of multiple personality In articles, books, and lectures, he described cases and grouped them into types, he told how some of the cases were caused and how some were cured, he encouraged other authors to contribute like observations, particularly to this Journal, and throughout his professional life he seemed to think of abnormal psychology, psychotherapy, and mental hygiene largely in terms of multiple personality

Many of Prince's contemporaries and successors have felt that he made too much of multiple personality Many, indeed, have thought that the supposed "cases of multiple personality" are frauds, or that they are caused by suggestion, and, in any event, that they are little related to science.

In such a situation, it is easy to confuse the question of genuineness with that of cause, and to overlook further important questions An actual crack in a vase is genuine whether caused by earthquake, by intent, or by mistake An apparent crack presents four main questions, namely· Is the crack a real crack? If so, what caused it? What means helped to cause and maintain the crack? And what does the crack teach us about vases? Applied to multiple personality the same questions become· How shall we define multiple personality? What cases have been reported? What types of organization do they show? What differences between personalities may appear within a given individual? How do conscious compare with subconscious personalities? Within individuals, is there any cooperation between different personalities? Is multiple personality genuine? And, if it is genuine, what are its causes, its mechanisms, and its significance?

These several questions we shall consider in relation to the evidence

Definition of Multiple Personality

A case of multiple personality we take to consist of two or more personalities each of which is so well developed and integrated as to have a relatively coordinated, rich, unified, and stable life of its own

Until psychological methods develop sufficiently to make a more precise definition possible, perhaps no two students in combing the literature would draw up identical lists of cases. Our rough definition, however, excludes many cases which seem too simply hypnotic, narrowly hysterical, evidently organic or psychotic, likely faked, or insufficiently described to be called multiple personality

Cases Reported

Cases which meet our definition are not common   Nevertheless, the literature most available to American psychologists has revealed 76 cases which we would call multiple personality, and a sampling of the Index Medicus suggests that the medical journals of the world contain at least as many more.

In 1886, Dana (21) published in a medical reference work brief histories of all the "cases of double-consciousness, or Periodical Amnesia," that he had been able to find in the literature   He included five of the cases that we shall list, and eleven others that we would not likely call multiple personality

Between 1889 and 1906, Dessoir (23), Binet (8), Azam (4), Laurent (59), Pierre Janet (55, 56, 57), Myers (81), Sidis and Goodhart (99), and Morton Prince (87),   respectively, published representative groups of cases, either as collections or within more comprehensive works   Of those publications, Myers' treatise contains many valuable summaries   Prince's article, published in 1906, covered 20 cases from various authors, and outlined the cases for comparison in a large, folded table   Too valuable to be lost completely behind the accumulating literature, Prince's table has suggested the present study

Apparently, the first published example of multiple personality was Mary Reynolds of Pennsylvania (Case 47 in the list below)   Her case was described by a relative, Andrew Ellicott, who was professor of mathematics at West Point, in 1815, and was reported briefly by Mitchill (sic) (75) in the Medical Repository in 1817   Mitchill entitled his report "A Double Consciousness, or a Duality of Person in the Same Individual"   The case was observed closely by a number of intelligent persons   Several of these, also, in retrospect, Mary Reynolds herself, wrote careful accounts which were quoted by various authors   One author, Plumer (84), upon examining the evidence, concluded that the case was undoubtedly genuine   Accordingly, in 1860, he undertook "to place before the public, and especially before those interested in mental philosophy," as many facts as he could find which seemed to him "to throw any light upon this case of Double Consciousness, the most remarkable which has been recorded"   S Weir Mitchell (72), drawing upon further documents, added some details in 1888

Mary Reynolds was born in England in 1793, and was brought to Pennsylvania by her family when she was four years old The girl was intelligent She grew up in a strongly religious atmosphere, and became melancholy, shy, and given to solitary religious devotions and meditations

She was considered normal until she was about eighteen Then she began to have occasional "fits," which were evidently hysterical One of these attacks, when she was about nineteen years old, left her blind and deaf for five or six weeks Some three months later, she slept eighteen or twenty hours, and awoke seeming to know scarcely anything that she had learned She soon became acquainted with her surroundings, however, and within a few weeks learned reading, calculating, and writing, though her penmanship was crude compared to what it had been Now she was buoyant witty, fond of company and a lover of nature

After five weeks of this new life, she slept long again, and awoke as her "normal" self, with no memory for what she had experienced since her recent lapse Thereafter the "new" or "second state" and the "old" or "first state," as she came to call them, alternated irregularly The second state gained over the first, however, and became more rich and stable, until the woman was about thirty-six years old At that time the second state became permanent and continued until her death in 1854

A case reported by Dyce (28) in 1822 seems to us too narrowly hysterical to be multiple personality, but it is interesting to find Dewar (24) saying, in 1823, that Dyce's case "is an instance of a phenomenon which is sometimes called double consciousness, but is more properly a *divided consciousness, or double personality,* exhibiting in some measure two separate and independent trains of thought, and two independent mental capabilities, in the same individual, each train of thought, and each capability, being wholly dissevered from the other, and the two states in which they respectively predominate subject to frequent interchanges and alternations "

The second earliest published case of multiple personality known to us was Sorgel, a Bavarian criminal youth described by von Feuerbach (108) in 1828 (Case 73) Sorgel was an epileptic, but he had two distinct organizations of consciousness, one criminal and one decent, of which the latter remembered practically nothing outside its own life, while the criminal personality remembered both lives

The third and fourth cases in order of publication are British, and appeared in 1845 One (Case 70) was reported by Skae (101) and the other (Case 43) by Thomas Mayo (67) Both cases were of the dual, alternating, mutually amnesic type

Barrows recorded the case of Anna Winsor of Rhode Island from 1860 to 1863, but it seems not to have been published before 1889 (Case 3)(51) This case showed coconsciousness, that is, awareness by a subconscious personality while the dominant personality was also conscious

Apparently the first published French case was Mesnet's soldier, F., 1874 (Case 45)(70) Azam began to study his famous Félida X in 1858, but he did not publish any results until 1876 (Case 1)(2, 3), when Dufay also published the case of Mlle R L (Case 18)(27) Each of these three cases was dual and alternating, but F's two personalities were mutually amnesic, whereas Félida's and Mlle R L's pairs were what we shall call one-way amnesic

The remaining cases scatter over the subsequent decades

About 57 per cent of all the cases on our list are American; 18 per cent, French, 16 per cent, British, and the rest, German and Swiss   Whether these proportions would hold upon combing all the literature of the several countries we do not know

For comparison and reference, the 76 cases are brought together and somewhat characterized individually in the list which follows. The various types of organization indicated, and the differences between personalities, will be explained in the sections that come next

For each case, the list gives a serial number, mentions the chief observer or observers of the case, and, so far as practicable, shows the name or pseudonym of the subject, the number of personalities displayed, the apparent type or types of organization, and any marked differences between the several personalities   Here we shall use:

Symbols	Meanings
A	Alternating personality
C	Coconscious personality
I	Intraconscious personality
M	Mutually amnesic
O	One-way amnesic
P	Propriety (good behavior)
Q	Quality of personality (temperament, sociability, values, etc)
R	Responses (automatic acts, paralyses, etc)
S	Sensibility (paresthesias, anesthesias, etc)
X	"Sex" (one personality professedly masculine, another, feminine, or one heterosexual, another homosexual, etc)
Y	Youthfulness (one personality seeming more youthful or childlike than another)

Thus, if the fabled case of Dr Jekyll and Mr Hyde appeared in the list as
"77   R L Stevenson   Dr Jekyll and Mr Hyde   2   A   M   QP"
it would mean that the case numbered 77, recounted by Robert Louis Stevenson and called Dr Jekyll and Mr Hyde, had two personalities which alternated with each other, were mutually amnesic, and showed differences in general quality and in propriety   Since no differences in apparent sex, youthfulness, sensibility, and responses other than general behavior were reported, we would not use the symbols X, Y, S, and R in cataloguing this case

References to primary and available secondary sources for the several cases appear in the last column

Types of Organization

In one type of case, as we have seen, the two or more disparate personalities function as conscious, dominant personalities only one

at a time   Every such personality is called an *alternating personality*

In another type, one personality continues to function sub-consciously, at least at times, while another is dominant, functioning consciously   The one that continues to function subconsciously is called a *coconscious personality*   Like the conscious personality, a coconscious one is aware of things going on in the world, but indicates its awareness through automatic writing or some other roundabout way   A coconscious personality may also alternate with a conscious one and report then, through ordinary means, what it observed when coconscious

In several cases, a coconscious personality has testified that it is aware not only of the outer world, but also of the thoughts of a conscious personality in the same individual   A coconscious per-sonality that thus knows another personality's thoughts we shall call an *intraconscious personality*

Many alternating personalities are *mutually amnesic,* remember-ing none of each other's experiences   Many, however, including all intraconscious personalities, are *one-way amnesic,* personality X remembering none of Y's experiences, but Y, all of X's.

Where there are more than two personalities, certain ones may be mutually amnesic, while others are one-way amnesic   Thus different types of organization may be combined within a single case

Further, according to the reports, for many if not all cases, the several characterizations, alternating, coconscious, intraconscious, mutually amnesic, and one-way amnesic, are more convenient than wholly exact   Often an alternating personality does not alternate completely, but combines some elements of the repressed personality with most elements of the dominant one, and shows somewhat different combinations from time to time   Often a coconscious personality is active subconsciously in various degrees, loses some elements to, and gains some from, the rest of the individual, and conflicts more or less with the conscious personality   An intra-conscious personality is more fully aware of the introspective experience of the conscious one at some times than at others, and perhaps always misses certain elements of that experience. Mutually amnesic personalities often remember a little from each other, perhaps only a "wraith of something there," as a waking person knows that he has had a dream and can almost remember what it

Cases	Observers	Names	Personalities	Types	Differences	References
1	E Azam	Felida X	2	A O	QP SR	(3, 2, 5, 6, 52, 8, 81, 87)
2	W F Barrett		2	A M	Q R	(7)
3	I Barrows	Anna Winsor ("Old Stump")	2	C O	QP SR	(51, 81)
4	N Bellanger	Madame de B	2	A O	QP	(39, 59, p 16)
5	A Binet	Hab	2	AC		(8, p 153, 56, p 435)
6	L Bonamaison	Mlle X	2	A O	Q SR	(9, 4)
7	L C Bruce		2	A	Q R	(12, 11, p 380)
8	S G Burnett		3	A M	QP Y R	(13)
9	S G Burnett		6	A MO	QP R	(14)
10	L Camuset and others	Louis Vivé	2	AC O	QP YSR	(15, 107, 10, 8, 81, 99, 87)
11	C E Cory	Maria	2	C	QP YSR	(17, 98, 69)
12	C E Cory	Patience Worth	2		QP R	(18, 98, 103)
13	G B Cutten	John Kinsel	3	A O	QP SR	(19, 60)
14	A H Daley	Mollie Fancher	3	A O	SR	(20, 81, 87)
15	C L Dana	Mr S	2	A M	Q R	(22, 99, pp 368–374)
16	R Dewey	Miss X	2	A MO	QPXYSR	(25)
17	J Donath		2	A M		(26, 76)
18	J Dufay	Mlle R L	2	A O	Q YSR	(27, 8)
19	M H Erickson, L S Kubie	Miss Damon—Miss Brown	2	CI O	Q R	(31)
20	A Feiling		2	A M	Q SR	(32)
21	Th Flournoy	Hélène Smith	5	AC MO	QPXYSR	(33, 34, 81, 58, 69)
22	A. Forel	M Z—F L	2	A O	QPX SR	(35)
23	S I Franz	Poultng—Poultney	3?	A M	Q R	(37)
24	H P Frost	Mary E Vaughn	5	ACIMO	QPXYSR	(99, pp 388 ff)
25	J A Gilbert	X	5	A MO	QP SR	(38, 99, pp 404 ff, 86)
26	H H Goddard	Norma—Polly—Louise	3	A MO	QP YSR	(40, 41)
27	A Gordon	K J W	2	AC M	QP R	(42)
28	P L Harriman	Helen Williams	2	A M	Q	(45)
29	B Hart	John Smith	2	A M	Q	(46)
30	R Hodgson, W James	Ansel Bourne	2	A M	Q	(47, 52, 81, 87)
31	W L Howard	Mr B	2	A M		(48, 49)
32	J H Hyslop	Charles P Brewin	2	A M	Q	(50)
33	J Janet	Blanche Wittmann	2	ACI O	S	(53, 80, 81, 87)
34	J Janet	Marcelline R	2	A O	Q SR	(56, pp 433–435, 57, 81, 69, 87)
35	P Janet	Léonie	3	AC O	QP YSR	(55, 52, 81, 69)
36	P Janet	Lucie	3	A O	Q SR	(54, 55, pp 85 ff, 52, 8, 59, 81)
37	P Ladame		2	A		(11, p 386)
38	F Leuret		2	A		(59, p 19)

Cases	Observers	Names	Personalities	Types	Differences	References
39	M G Marinesco	Alma Z	3	AC MO	Q XYSR	(62)
40	R O Mason	Charles W	2	A M	Q	(63, 64, 81, 99, pp 420 ff, 87)
41	E E Mayer		5	A M	SR	(65, 87, 36)
42	H Mayo		2	A M		(66, 23)
43	T Mayo	C W	2	A	SR	(67, 11, pp 384–385)
44	J N McCormack	F	2	A M	Q	(68)
45	E. Mesnet		4	AC	Q SR	(70, 8, 81, 87)
46	T W Mitchell	Milly P	2	A M	Q SR	(73, 74, 69)
47	S L Mitchill	Mary Reynolds	2	A O	QP YSR	(75, 84, 72, 52, 81, 87, 69, 61)
48	A M Muhl	Aileen—Betty	5	AC	QP	(77, pp 125–133)
49	A M Muhl	Jorge Isaacs—Horacio	3?	C	Q X	(77, pp 86–88)
50	A M Mühl	My Dearest	3	AC	Q Y	(77, pp 38, 43–48)
51	A M Muhl	Star—Zorada	3	ACI O	Q	(77, pp 76–78, 141–203)
52	A M Muhl	Tookie—Luzbeth	2	AC	QP Y	(77, pp 53–57, 89–95)
53	A M Muhl	Violet Z	7	A M	Q X R	(77, pp 68–74, 103)
54	A E Osborne	The tinsmith	2	AC		(82, 99, pp 365–368)
55	A Pitres	Dad	3	A MO	QP	(83, pp 266 ff, 59, pp 24–25)
56	M Prince	B C A	3	ACI O	QP YSR	(89, pp 545 ff, 90, 91, 69)
57	M Prince	Miss Beauchamp	4	ACIMO	QP YSR	(86, 88, 90, 91, 103, 87)
58	M Prince	Mrs J	2	A M	QP S	(87)
59	M. Prince	Mrs R	2	ACI O	QP SR	(85)
60	W F Prince	Doris Fischer	4	ACIMO	QP YSR	(92, 93, 79, 69)
61	W F Prince	Henrich Meyer	2	A M	QP YS	(94)
62	A Proust	émile X	2	A M		(95, 8, 81, 87)
63	L Rice	The artist	3	A	QP SR	(96)
64	L Rice	The bank guard	2	A	QP SR	(96)
65	L Rice	Killer Burke	2	A	QP	(96)
66	W Richmond	Violet X	7	AC	QPX R	(77, 103)
67	R M Riggall	Miss Dignity	8?	A M	QP Y R	(97)
68	B Sidis, S P Goodhart	Mr Hanna	2	A M	YSR	(99, 87, 69)
69	G R Sims		2	A M		(100, 11, pp 382–383)
70	D Skae		2	A M	QP	(101, 81)
71	E E Slosson	C F H	2	A M	Q SR	(102)
72	G R Trowbridge		2	A	QP	(104, 105, 87)
73	A ♥ Feuerbach	Sorgel	2	A O	QP SR	(108, 109, 81, 87)
74	R v Krafft-Ebing	Ilma S	4?	AC MO	QPX ASR	(110)
75	C C Wholey	Mrs X	6	A MO	QPXYSR	(112)
76	A Wilson	Mary Barnes	12	A MO	QP YSR	(113, 114, 99, pp 387–388, 87, 11, pp 380–382)

was- about   A one-way amnesic organization is not perfectly closed to memories in the one direction and is not wholly open to them, especially to their subtler meanings, in the other direction   In a word, the several characterizations are only relatively exact

A good example of type *A M,* alternating, mutually amnesic, multiple personality is Mr Hanna (Case 68)   Hanna lost his memories in a driving accident, then developed a new personality which alternated with the original one, neither personality remembering the other, until the two were synthesized through psychotherapeutic recalls and encouragement

Type *A O,* alternating, one-way amnesic, is illustrated by Félida X (Case 1) Her second personality remembered not only its own intermittent life but also that of the primary Félida

The *C,* coconscious, type of organization is reported in fewer than a third of the cases, and then usually in combination with *A*   Erickson feels, however, that at least intermittently C cases are more common than the tradition of A would suggest   Thus, he wrote in 1940 (in a letter) that every one of the seven cases of dual personality that he had worked with was organized somewhat as follows "A, the original personality, now and then departs, becomes absent, and personality B, the second personality, suddenly appears and performs all of A's routine duties Later, A returns and there are present both A and B, though A knows nothing of B B, however, is fully aware that A has returned and simply relinquishes the direction of matters to A and stays around to give A proper advice and direction, and then, when A finally has taken adequate charge and does not need any further help, B vanishes, only to return when some stress within A summons B "   Perhaps many a coconscious personality is overlooked

If a *C M,* coconscious, mutually amnesic, type occurs it does not appear in the more accessible accounts of cases   The M's listed for Cases 21, 24, 27, 40, 57, 60, and 74 apply only to the A personalities in those same cases   Perhaps complete records would show that every C personality is too vigorous and inclusive to stay within M

The most famous *C O* case is Miss Beauchamp (Case 57), whom Morton Prince presented to the world in his first psychological book (86).   In this case, two of the disparate personalities, The Saint and The Woman, alternated with each other, also with Sally   Sally, however, when not dominant continued to function as a coconscious personality   The Saint was not amnesic for The Woman, but was amnesic for Sally   The Woman was amnesic for both The Saint and Sally   Sally, on the other hand, was amnesic only for The Saint's and The Woman's education in foreign languages, shorthand, and the like   Thus, apart from that bit of amnesia, Sally's organization with the other disparate personalities was C O

In Cory's Maria (Case 11), at different times each of the two personalities remembered what the other had experienced, and each was coconscious, yet the two personalities were markedly different from, and opposed to, each other

The *I O,* intraconscious, one-way amnesic, type appears in at least seven cases One of these is B C A (Case 56), which Prince considered more important than the Beauchamp case

B C A began to split when part of her rebelled against certain circumstances of her married life   Later, under stress involving those same circumstances, that part developed further and became a coconscious and intraconscious personality called B. The conscious personality that remained was called A   Eventually, Prince synthesized B and A, first partially, into a relatively incomplete personality called C, and

after a while more fully into a relatively complete C   B continued coconscious and intraconscious so long as C remained relatively incomplete

DIFFERENCES BETWEEN PERSONALITIES

In most cases of multiple personality, the several personalities are unlike one another somewhere in the gamut of wishes, desires, attitudes, daily interests, sensibilities, and particular responses, to say nothing of knowledge

In many cases, the several personalities differ considerably in Q, quality in general

Thus, in the B C A case, A was irritable, timid, grateful, loving, sympathetic, easily humiliated, melancholy, frugal, serious, neurasthenic   B, in contrast, was hearty, mischievous, indifferent to people, self-sufficient, happy, extravagant, playful, vigorous

In Mrs X (Case 75), Q differences are visible in a motion-picture record kept by Wholey

In some cases, the personalities differ markedly in P, propriety or good behavior

Émile X (Case 62) in one personality was a respectable lawyer, but in the other was destructive and a gambler, swindler, and thief   F (Case 45) in one personality was pleasant and honest, but in the other personality was kleptomaniac   Sorgel (Case 73) in one personality was quiet, pious, and industrious   In the other personality he was insane, often violent, and assaultive, and one time chopped an old woodcutter to death and drank his blood

Such Jekyll-Hyde differences between the personalities are, however, by no means the rule   Almost all of the P's listed in the table are much less serious than the Jekyll-Hyde picture, many of the P's were more serious for the Victorian personalities involved than they would be for us, and about half of the cases as reported show no marked P differences or even deviation from the ordinary P of their times—in many cases, every one of the personalities seems quite decent.

An X difference, that is, having at least one personality either of the opposite sex or of the opposite sexual orientation, appears in only nine of the sixty-six cases as reported   (Mere frigidity, which might, it is true, cover up an X deviation, is not considered here.) In these nine cases, X differences are marked

For example, when Violet Z (Case 53) once wrote automatically with both hands at the same time, the left hand wrote small, in a feminine style, and characterized itself as a girl by the name of Aneta Glane, while the right hand wrote large, in a masculine style, and claimed to be a man named Daniel Raun   In Case 22,

M Z was overtly heterosexual, and F L, who alternated with her, was overtly homosexual

Y, youthfulness, differences are often striking

In the B C A case (56), A was a woman of forty, and B was like a girl of twenty   In the Beauchamp case (57), The Saint was an intellectual young woman, and Sally, a child of ten or twelve   The Doris Fischer and the Norma—Polly—Louise cases (60 and 26) each contained a personality "aged" less than eleven years   In Mrs X (Case 75), one personality seemed to be that of an infant a year old   Some of Wholey's pictures show this personality "learning to walk "

S, sensibility, differences appear in so many cases, and occur so consistently in other forms of dissociation, that we wonder whether these differences have not merely been overlooked in the few cases for which they are not reported

Mrs X (Case 75), when about to give birth to a child without an anesthetic, slipped into her "Susie" personality because Susie never felt pain   Sally Beauchamp (in Case 57), as is well known, felt no fatigue   She was also analgesic and tactually anesthetic except when either visual or auditory stimuli accompanied the stimuli for pain or touch   Blanche Wittman (Case 33) in one phase was analgesic, tactually anesthetic, without muscle sense, deaf in one ear, weak-visioned in one eye, wholly color blind, and so on

Many subjects with S differences do not merely lack certain sensations, but have some that they ought not to have   In X (Case 25), one of the personalities raved with pain from headache and was always thirsty   Charles W (Case 41) in one personality suffered constant pain and tenderness which was thought to mean a hepatic abscess, but in the other personality he was well

Differences in R, responses considered particularly, are no less common than differences in S

Blanche Wittman (Case 33) in one personality was paralyzed, and in the other, normal   One of Marcelline R's (Case 34) personalities was paralyzed and suffered from uncontrollable vomiting which threatened her life   Her other personality was normal   Louis Vivé's (Case 10) different personalities' paralyses and contractures are shown in photogravures in Bourru and Burot's book   In many a case of multiple personality, at least one of the personalities does automatic writing. Commonly, too, the different personalities have different handwritings   The personalities differ likewise in other skills   One case (Case 7) in one phase was ambidextrous and understood English only, but in the other phase was left-handed and spoke Welsh

COMPARISON BETWEEN CONSCIOUS AND SUBCONSCIOUS PERSONALITIES

Given any difference between a conscious and a subconscious personality, it might seem that the inferior personality should be the subconscious one, kept down as much as possible, and that the better personality should be the dominant, conscious one.   In many

cases it is so, but in others, the less evident personality is the better one, in culture, genius, sanity, morality, health, or a combination of these.

Cory (18) observed that Patience Worth (Case 12), the coconscious personality of Mrs Curran, "is original, creative, possessing a delicate sense of beauty, a hardy rationality, and, above all, and perhaps most surprising, a moral and spiritual elevation" Indeed, Patience Worth seems only to be deluded upon one point "She insists that she is the discarnate spirit of an English woman who lived in an age now long since passed She not only insists upon it but she argues her claim at length, and with cleverness That she is honest in this belief there is no reason to doubt"

Félida X's (Case 1) conscious personality was very poorly integrated, she was depressed, had paralyses and contractures, and was subject to various pains and an hysterical hemorrhage from her lungs Her subconscious personality, which turned out to be essentially her normal, inclusive one, had only a few stigmata which diminished as this personality grew to occupy more of her time and being

In Anna Winsor (Case 3), the conscious personality was a raving maniac, and made all of the body except the right hand act as such In contrast, the coconscious personality was rational, and, through the right hand, grasped the left to keep it from injuring the subject herself, tried to keep her properly covered at night, rapped on the headboard to warn her mother when anything went wrong, and between times wrote intelligent letters, poems, questions, and answers to questions

COOPERATION BETWEEN DISPARATE PERSONALITIES

Though often mutually opposed to each other, it is not unusual for one disparate personality to sympathize with another and even to help that other Apparently every disparate personality perceives that whatever is vital for one personality is vital for all, physically if not spiritually.

B (in Case 56) wrote to her conscious self, A, what A really needed to know B, also Sally Beauchamp (Case 57), Milly P (Case 46), Miss Brown (Case 19), and others as coconscious personalities wrote to their physicians notes calculated to protect and to help cure at least the conscious personalities of these same patients As C (Case 56) put it, "Even as B, feeling sure that the integration of the whole self meant my own extinction, I still, for the most part, gave my help toward that end" (90, p 220) She must have felt, too, that this extinction both of herself, B, and of her rival, A, meant a richer life as C In the case of Anna Winsor, the coconscious self's care for the crazy conscious self will be remembered

GENUINENESS OF MULTIPLE PERSONALITY

That multiple personality is a genuine phenomenon is attested by the following facts The subjects, including those not listed here, number more than a hundred. These subjects are widely distributed in time and in space Most of them had never heard

of other cases   A number of the subjects are uncommonly high-minded, honest people (e g , Cases 12, 19, 26, 30, 47, and 68). Likewise, the observers number more than a hundred, they, too, are widely distributed, many of them knew little or nothing of one another's work, and most of them have been accustomed to watching for fraud and to maintaining professional standards. Finally, many of the cases have been judged independently by different observers; and among all the various cases, there are essential parallels in the records for each type of multiple personality

Of Mary Reynolds, Plumer (84) wrote "The leading facts are authenticated by a chain of testimony, furnished by witnesses of unimpeachable character, covering the whole period Mary Reynolds had no motive for practicing an imposture, and her mental and moral character forbids the supposition that she had either the disposition or ability to carry out such a fraud, and had she done so, she could not have avoided detection in the course of the fifteen years during which the pretended changes alternated, and the subsequent quarter of a century which she professed to pass wholly in her second state"

Goddard (41, pp 177–178) observed of Polly—Norma—Louise   "Perhaps the strongest evidence that Louise was a genuine experience will be found in the fact mentioned without solicitation by several of those who have seen her in both if not all personalities that Louise is so different from the others that one finds oneself instinctively treating her in a different manner from that with which one treats Norma or Polly   Some of my assistants have said that they did not know how to act in Louise's presence   I found myself talking to her and treating her as though she was no relation whatever to Norma   Had the Louise personality been put on, one can hardly imagine it being so genuine in all those intangible, indescribable details that one would instinctively regard her as a different personality   It is a very high order of acting, seldom attained by the professionals, that leads one to forget that the individual is playing a part   But this has been the case every time that Louise has appeared and with every individual who has known her as Norma

"Another fact which argues for the genuineness of the amnesia is her facial expression   No one who has seen the two personalities has failed to note the contrast in appearance   To put it aesthetically, Louise is much prettier than Norma   Apparently the Norma countenance has some of her nervousness about it which draws it somewhat out of shape   This is not particularly noticeable until compared with the countenance of Louise, when it is easily seen that there is a restfulness and a calm and the natural contours form a more pleasing group of lines   It is hard to imagine that this could in any way be put on   From all these considerations it seems much more plausible to conclude that we are dealing with a genuine amnesia"

Of course, to admit multiple personality as real is not to admit all the special phenomena claimed for it   Most of us doubt the "evidence" for spiritism, telepathy, and clairvoyance reported for multiple personalities by Dailey, Mason, and some other observers

Many students have doubted especially the "coconscious" effect, ascribing it to mere habitual activity, to diminished consciousness,

or to rapid alternations of consciousness   Messerschmidt .(71) undertook to induce coconscious activity in several "normal" hypnotic subjects, and measured the results. She found so much interference between the conscious and the "coconscious" activities that she concluded that "complex conscious and subconscious processes do not go on independently " To those who have worked with coconscious phenomena, however, it seems clear that Messer-schmidt's subjects were not sufficiently dissociated to allow such phenomena to occur As Janet said of subjects who do really automatic (coconscious) writing, "One must see these personalities reveal, without their knowing it, what they wish to keep concealed, and what they think they have not told anyone" (56, p 427)   Also, as the Ericksons point out, Messerschmidt does not seem to have kept her subjects' "conscious" and "subconscious" tasks apart by proper technical methods (30)   Some experiments which have employed those methods have yielded coconscious phenomena (30, 16, 45a)

Apparently most ready to accept multiple personality as real are (1) persons who are very naive and (2) persons who have worked with actual cases or near cases

CAUSES OF MULTIPLE PERSONALITY

Various authors in the last century and in this have thought that multiple personalities are caused by suggestion—suggestion either from the patient himself, from some outside person, from the physician (especially if he hypnotizes the patient), or from more than one source   Thus, Riggall (97) said that the subject, "by dramatizing himself into some other personality, for a time gets rid of the burden of his neurosis " Janet (57) called attention to "the influence of the observer, who knows his subject too well and is too well known to him " Harriman (43; 44; 45a) has pro-duced characteristic phenomena of multiple personality experi-mentally, hence suspects "that some investigators have unintention-ally produced behavior which they describe as multiple personality "

Apparently those authors are right in part   Many people know or have imagined persons whom they themselves would like to be   Children often pretend, and children and adults imagine, that they are others than themselves. Most people know that actors and hypnotic subjects play roles; many have heard of amnesia

cases.; and a few have heard of multiple personality A psychotherapist who thinks nothing of multiple personality, and who undertakes to steady and strengthen his patients directly, must discover few if any multiple personalities; whereas a psychotherapist who is aware of multiple personality as a pattern, and who seeks out his patients' conflicting systems, especially if he does so through hypnosis or through automatic writing, must meet relatively many multiple personalities

One of the cases in which a disparate personality developed spontaneously, not through hypnosis or automatic writing, was a college student who was active in dramatics (Case 28) Harriman (45) found that the new personality called itself "Helen Williams," and that it was modeled after a real Helen Williams, a successful business woman whom the subject greatly admired

Norma—Polly—Louise (Case 26) contained a four-year-old disparate personality called Polly The young woman herself was called Norma She was an orphan, unloved and unhappy Shortly before Polly appeared and Norma—Polly became a patient, Norma visited her four-year-old sister at the home of the sister's foster parents This home seemed ideal, according to Goddard, the sister "was cared for and loved and favored, and had everything that a child could want " "It is unthinkable that during those days Norma should not have thought many times 'Oh that I were in her place'" Another sister was named Pauline, and was called, familiarly, Polly Goddard does not say whether she was especially enviable, but he points out that Norma's secondary personality seems to have been a combination suggested by the two sisters (41, p 96 circa, 40)

In a number of cases, disparate personalities have emerged during hypnosis or automatic writing Examples are Pierre Janet's Léonie, several of Morton Prince's cases, and the cases reported by Muhl

Nevertheless, to ascribe multiple personality to suggestion in the abstract is to overlook more essential causes Suggestion, to be effective, must find a ready recipient, and recipients are made ready variously by nature and by special physiological, psychological, and environmental circumstances

It is well known that a severe shock can make a person forget much if not all that he has known, including his own name This is apparent in the shock therapies (insulin, metrazol, electroshock), but in them the physician or nurse takes care to remind the patient of the patient's name and setting A person who becomes amnesic from any shock, even an epileptic attack, in a new place and among strangers may well need and develop a new personality with which to meet social and economic demands

The student who developed the "Helen Williams" personality felt insecure as compared with her model. Norma needed some such security and affection as her four-year-old sister had

Doris Fischer (Case 60), Norma—Polly—Louise (Case 26), and others seemed driven into multiple personality by a drab, loveless, frightful, or otherwise stressful life. The history of Norma is particularly eloquent upon this point (40, 41)

Even the disparate personalities which have come out during hypnosis or auto-matic writing cannot be ascribed simply to suggestion   Hart (46) traced John Smith's (Case 29) secondary personality to "the psychological investigation to which the patient was being subjected at the time," but added that the bringing-out of buried memories and conflicts aroused resistance which became "crystallised" as the secondary personality   In Morton Prince's cases (Cases 56–59), Erickson's Miss Damon (Case 19), and other instances, such crystallization clarified the prob-lem for the psychotherapist, and at least in that way helped him to cure the patient Thus, in Erickson's case, the Miss Brown who emerged knew the repressed material, and yielded it to Miss Damon and to Erickson, so that the patient was cured completely within a few hours (31)

Like ordinary personality, multiple personality is a psychological product   In multiple personality, the individual's native capacities and past and present circumstances, including health, training, pre-occupations, and stresses, have caused him to develop at least one disparate, protective role.   It is a role, in that it is a pattern, organiza-tion, or design for living, fairly well integrated within itself   It is protective, in that within it the individual can escape from some of his stresses, and so can feel more comfortable than he knows how to feel otherwise   This protective role is disparate, finally, in that it is more or less opposed to, and separate from, the rest of the individual's total mental make-up

The individual derives the role from experience, whether passively or actively, and consciously or unconsciously   Passively, a role may come to him from out of his own history, or from a living example, or from verbal or other suggestion   Actively, he may select or synthesize a role from his various observations and thoughts   In either case, apparently, he may be little aware or much aware that he is getting a role

The role that he finds acceptable may be simple at first, for example, living like a baby, or a child, or a peaceful person, or a sailor, or any real or imagined person   Whatever the role, how-ever, the more the individual is interested in it and is unable to make it either include or exclude all the rest of his make-up, the more he learns new reactions that augment the welcome role   Thus, so long as circumstances favor it, the role grows stronger and richer, until it becomes a more or less dominant, disparate personality

Meanwhile, the rest of the individual's make-up has been striving, according to the laws of nature, to maintain itself, or systems within the rest have been striving to maintain themselves   Thus the individual develops at least two personalities, each of which

becomes stronger and richer, except in so far as it loses components to the ever-grasping rival personality.

The result is the grand psychoneurosis, multiple personality

Mechanisms of Multiple Personality

The suggestions, the native capacities, and the past and present circumstances which cause multiple personality seem to implicate as mechanisms, variously, cortical damage, lowered general energy, unbalanced urges, severe conflicts, excessive learnings and forgettings, and dissociations   Thus, a head injury, marked intoxication, or extreme fatigue appears as a factor in many a case. Lowered general energy undoubtedly favors multiple personality (55, 56, passim, 41, pp 115-116, 192)   Unbalanced urges, such as excessive affection, sexuality, or ambition tend to thwart and repel other parts of the personality   Severe conflicts between urges use up energy, severe conflicts also throw urges out of balance, augmenting some, often defensorily against others; such conflicts are inherently disruptive, and they precipitate emotions which likewise use up energy, unbalance urges, and are disruptive.   Excessive learnings of odd patterns, from quiet fantasies to vigorous roles, and forgettings of realistic associations, are essentially disruptive   Lowered energies, unbalanced urges, severe conflicts, and excessive learnings and forgettings both derive from and make for dissociations.

Whether the higher neural functions call for a field theory or a complicated localization theory, in multiple personality the nervous system of the individual seems to function as two or more systems, one for each of the personalities   Each of these neural systems is fairly well integrated within itself, is more or less dissociated from the rest, and may or may not inhibit the rest   Apparently, in cases of purely alternating personalities, only one system functions at a time, but where there is a coconscious personality, more than one system functions at a time   Mutually amnesic personalities represent systems which are dissociated from each' other reciprocally, that is, in both directions, whereas one-way amnesic personalities are dissociated from each other nonreciprocally, apparently in only one direction.   Whatever the type of organization of the personalities, the Q, P, X, Y, S, and R differences between them depend upon what conditioned reflexes, habits, complexes, and attitudes each personality has within itself.

To be sure, many questions remain about mechanisms—questions neuroanatomical, physiological, psychological, and epistemological if not metaphysical Perhaps no one can answer any of these further questions now, and perhaps many of them never can be answered Similar questions, however, apply to normal personality. Whatever the ultimate mechanisms of multiple personality may be, they seem no more mysterious than those of normal personality; indeed, the mechanisms of multiple personality are those of normal personality working under abnormal conditions

SIGNIFICANCE OF MULTIPLE PERSONALITY

The phenomena of multiple personality make it plain that (1) restlessness during sleep, (2) somnambulism, (3) daydreaming, (4) partial dissociation of personality, (5) psychoneuroses, and (6) multiple personality are essentially similar and continuous (1; 106; etc) Since multiple personality is the climax of all such failures of integration, it serves as a deep and magnifying vivisection which considerably reveals their causes, their mechanisms, and, by implication at least, their cures Hypnosis can reveal many of the same things, and can do so without waiting for pathological instances (111, 29), but hypnosis is limited in that no humane hypnotist will vivisect as ruthlessly with it as nature does with multiple personality. It follows that to study multiple personality helps us to understand the everyday "sides to personality"; various incubations, hallucinations, illuminations, blockages, compulsions, compensations, and compromises, whether "normal" or "abnormal", all psychoneuroses; psychotherapy, mental hygiene; and normal personality.

As Francis Bacon said, "Then only will there be good ground of hope for the further advance of knowledge, when there shall be received and gathered together into natural history a variety of experiments, which are of no use in themselves, but simply serve to discover causes and axioms; which I call *'experimental lucifera,'* experiments of *light* " Cases of multiple personality are natural *experimenta lucifera.*

BIBLIOGRAPHY

1 ALLEN, I M. Brit J. med Psychol., 1932, 11, 319–331
2 AZAM, E   Ann méd -psychol , 1876
3 AZAM, E   Rev sci , Paris, 1876
4 AZAM, E   In Tuke, D H (ed), A dictionary of psychological medicine (etc), Vol. 1 London Churchill, 1892 Pp 401–406

5 Azam, E   *Hypnotisme, double conscience et alterations de la personnalité*   Paris, 1887   Pp 133 ff

6 Azam, E   *Hypnotisme et double conscience origin de leur étude et divers travaux sur le sujet analogues*   Paris Alcan, 1893   Pp 37 ff , 149–150

7 Barrett, W F   *Proc Soc psych Res , Lond,,* 1887, 4, 230–232

8 Binet, A   *Alterations of personality* (Trans by Baldwin)   New York Appleton, 1896

9 Bonamaison, (L)   *Rev de l'hypnotisme,* 1890, 4, 234–243

10 Bourru, H , & Burot, P   *Variations de la personalité*   Paris Baillière, 1888   Pp 19 ff

11 Bramwell, J M   *Hypnotism its history, practice and theory*   London Rider, 1913 or 1921

12 Bruce, L C   *Brain,* 1895, 18, 54 ff

13 Burnett, S G   *Med Herald (St Joseph),* 1903, 22, 332–341, or *Okla med News-J.,* 1903, 11, 248–259

14 Burnett, S G   *Med Herald (St Joseph),* 1906, 25, 485–494

15 Camuset, (L)   *Ann méd -psychol ,* 1882

16 Cass, W A   *Psychol Bull ,* 1941, 38, 744

17 Cory, C E   *This Journal,* 1919, 14, 281–285

18 Cory, C E   *Psychol Rev ,* 1919, 26, 397–406

19 Cutten, G B   *Psychol Rev ,* 1903, 10, 465–497, 615–632

20 Dailey, A H   *Mollie Fancher the Brooklyn enigma* (etc)   Brooklyn Eagle, 1894

21 Dana, C L   In Buck, A H (ed), *A reference handbook of the medical sciences* (etc), Vol 2   New York Wood, 1886   Pp 277–279

22 Dana, C L   *Psychol Rev ,* 1894, 1, 570–580

23 Dessoir, M   *Das Doppel-Ich* (2nd ed)   Leipzig Gunthers, 1896   P 67

24 Dewar, H   *Trans roy Soc Edinburgh,* 1823, 9, 366–379

25 Dewey, H   *This Journal,* 1907, 2, 141–154

26 Donath, J   *J Psychol Neurol , Lpz ,* 1927, 33, 1–11

27 Dufay, J   *Rev sci , Paris,* 1876

28 Dyce, W   A paper reported by Dewar (24)

29 Erickson, M H   *Psychoanal Quart ,* 1939, 8, 338–353

30 Erickson, M H , & Erickson, E M   *J gen Psychol ,* 1941, 24, 95–133

31 Erickson, M H , & Kubie, L S   *Psychoanal Quart ,* 1939, 8, 471–509

32 Feiling, A   *Lancet,* 1915, 2, 63–66

33 Flournoy, T   *Des indes à la planète mars étude sur un cas de somnambulisme avec glossalalie*   Geneva, 1899

34 Flournoy, T   *Nouvelles observations sur un cas de somnambulisme avec glossolalie*   Geneva, 1902

35. Forel, A   *Hypnotism—or suggestion and psychotherapy a study of the psychological, psycho-physiological and therapeutic aspects of hypnotism* (Trans by Armit)   New York Rebman, 1907

36 Fox, C D   *Psychopathology of hysteria*   Boston Badger, 1913   Pp 312–313

37 Franz, S I   *Persons one and three*   New York McGraw-Hill, 1933

38 Gilbert, J A   *Med Rec , N Y ,* 1902, 62, 207–211

39 Gilles de la Tourette   *L'hypnotisme et les états analogues au point de vue médico-legal*   Paris, 1887

40 Goddard, H H   *This Journal,* 1926, 21, 170–191

41 Goddard, H H   *Two souls in one body?*   New York Dodd, Mead, 1927

42 Gordon, A   *Amer J med. Sci ,* 1906, 131, 480–486

43 Harriman, P L   *Cryptic automatic writing by a multiple personality* (an instructional film)   Bethlehem, Pa Psychological Cinema Register, 1941

44 Harriman, P L   *This Journal,* 1942, 37, 245

45 Harriman, P L   *Psychiatry,* 1942, 5, 179–186

45a Harriman, P. L   *Amer J Orthopsychiat ,* 1943, 13, 638–643

46 Hart, B   *J ment Sci ,* 1912, 58, 236–243

47 Hodgson, R   *Proc Soc psych Res , Lond ,* 1891, 7, 221–255

48 Howard, W L   *Maryland med J ,* 1898

48 Howard, W L   *J Soc psych Res , Lond ,* 1899, 9, 87–89

50 Hyslop, J H   *J Amer Soc psych Res ,* 1913, 7, 201–229

51 James, W   *Proc Amer Soc psych Res ,* 1885–1889, 1, 551–554

52 James, W   *The principles of psychology,* Vol 1   New York Holt, 1890

53 Janet, J   *Rev sci , Paris,* 1888, 1, 616 ff

54 Janet, P   *Rev phil , Paris,* 1887, 1, 449 ff

55 JANET, P *L'automatisme psychologique essai de psychologie expérimentale sur les formes inférieures de l'activité humaine*, passim Paris Alcan, 1894

56 JANET, P *The mental state of hysterics a study of mental stigmata and mental accidents* (Trans by Corson) New York & London Putnam's, 1901

57 JANET, P *The major symptoms of hysteria* New York Macmillan, 1907 or 1920 Pp 85-92

58 JASTROW, J *The subconscious* Boston Houghton Mifflin, 1906 Pp 336-347

59 LAURENT, L *Des états seconds variations pathologiques du champ de la conscience* (Ed by O Doin) Paris, 1892

60 LLOYD, W E This JOURNAL, 1908, 2, 239-259

61 MACNISH, R *The philosophy of sleep* Glasgow 1830, and later editions

62 MARINESCO, M G *Bull Acad de Med*, 1931, 106, 647-654

63 MASON, R O *J nerv ment Dis*, 1893, 20, 420-423

64 MASON, R O *Telepathy and the subliminal self an account of recent investigations regarding hypnotism, automatism, dreams, phantasms, and related phenomena* New York Holt, 1897 Pp 125-127

65 MAYER, E E *J Amer med Ass*, 1901, 37, 1601-1605

66 MAYO, H *Proc Soc psych Res*, *Lond*, 1883, 1, 288

67 MAYO, T *Lond med Gazette*, 1845, N S 1, 1202.

68 McCORMACK, J N *Med Rec*, *N Y*, 1883, 23, 570

69 McDOUGALL, W *Outline of abnormal psychology* New York Scribner's, 1926

70 MESNET, E *Union méd*, 1874

71 MESSERSCHMIDT, R This JOURNAL, 1927, 22, 325-340

72 MITCHELL, S W *Trans College Physicians Phila*, 1888, 3d Ser, 10, 366-389

73 MITCHELL, T W *Proc Soc psych Res*, *Lond*, 1912, 26, 286-311

74 MITCHELL, T W *Medical psychology and psychical research* London Methuen, 1922

75 MITCHILL, S L *Med Repository*, 1817, N S 3, 185-186

76 MOORE, T V *Stud Psychol Psychiat Cathol Univ Amer*, 1938, 4, No 3

77 MUHL, A M This JOURNAL, 1922, 17, 168 ff

78 MUHL, A M *Automatic writing* Dresden & Leipzig Steinkopff, 1930

79 MURPHY, G (Ed) *An outline of abnormal psychology* New York Modern Lib, 1929 Pp 221-248

80 MYERS, F W H *Proc Soc psychic Res*, *Lond*, 1889, 6, 216-221

81 MYERS, F W H *Human personality and its survival of bodily death* Vol I London & New York Longmans, 1903

82 OSBORNE, A E *Medico-legal J*, 1894, 12, 22-41

83 PITRES, A *Leçons cliniques sur l'hystérie et l'hypnotisme* (etc) Paris, 1891 Pp 269 ff

84 PLUMER, W S *Harper's new mo Mag*, 1860, 20, 807-812

85 PRINCE, M *Bost med surg J*, 1890, 122, 463-467, 493

86 PRINCE, M *The dissociation of a personality*, etc (New York Longmans, Green, 1905.

87 PRINCE, M This JOURNAL, 1906, 1, 170-187, or *Bost med surg J*, 1906, 155, 372-376, 407-409

88 PRINCE, M This JOURNAL, 1920, 15, 67-135

89 PRINCE, M *The unconscious the fundamentals of human personality normal and abnormal* New York Macmillan, 1921 Pp 545-633

90 PRINCE, M *Clinical and experimental studies in personality* Cambridge Sci-Art, 1929

91 PRINCE, M Same, 1939

92 PRINCE, W F *Proc Amer Soc psychic Res*, 1915-1917, 9-11

93 PRINCE, W F *J Amer Soc psychic Res*, 1916-1918, 10-12, passim

94 PRINCE, W F *Proc Amer Soc psychic Res*, 1923, 17, 217-272

95 PROUST, A *Rev de l'hypnotisme*, 1890, 4, 267 ff

96 RICE, L *J Amer Soc psychic Res*, 1938, 32, 70-78

97 RIGGALL, R M *Lancet*, 1931, 2, 846-848

98 ROBINSON, E S, & RICHARDSON-ROBINSON, F (Eds) *Readings in general psychology* Chicago University of Chicago Press, 1929 Pp 693-697

99 SIDIS, B, & GOODHART, S P *Multiple personality an experimental investigation into the nature of human individuality* New York Appleton, 1904

100 SIMS, G R *Referee* (a journal), 1897

101 SKAE, D *Northern J Med*, 1845, 3, 10 ff

102 SLOSSON, E E *J Soc psychic Res (Lond)*, 1893, 6, 162-163

103 Taylor, W S (Ed) *Readings in abnormal psychology and mental hygiene* New York Appleton, 1926

104 Trowbridge, G R *Med News,* 1891

105 Trowbridge, G R *Proc Soc psychic Res, Lond,* 1891, 7, 256–257

106 Verriest, G *Bull Acad roy de Méd de Belg,* 3 s, 16, or *Rev méd,* Louvain, 1882, 1, 317–329

107 Voisin, J *Arch de Neurol,* 1885

108 von Feuerbach, A R *Aktenmassige darstellung merkwurdiger verbrechen* Frankfort a m, Heper's, 1828 Pp 120–138

109 von Feuerbach, A R *Narratives of remarkable criminal trials* (Trans by Gordon) London John Murray, 1846

110 von Krafft-Ebing, R *An experimental study in the domain of hypnotism* (Trans by Chaddock) New York & London Putnam's, 1889

111 Wells, W R *Psychol Rev,* 1924, 31, 88–91

112 Wholey, C C *Amer J Psychiat,* 1933, 12, 653–687

113 Wilson, A *Brit med J,* 1896

114 Wilson, A *Proc Soc psychic Res, Lond,* 1904, 18, 352–415

THE SIGNS OF INCIPIENT FASCISM *

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I

MUCH editorial fun has been had as a result of Mr Henry Wallace's attacks upon "American fascists," it apparently being the belief of some editors that Mr Wallace is assuming the role of a modern Don Quixote insistent upon tilting with windmills I think Mr Wallace's difficulties with the press rest on his failure to make clear what he means by the term "fascist" And I think much of the current confusion, charge and countercharge, and bandying about of this epithet can be traced to the fact that "fascism" has come to be one of those words which mean many things to many people. The situation is well described by a Washington paper which said in February of 1944: "Anyone whose opinion differs materially from our own is now known as fascist"[1]

That the confusion surrounding the meaning of fascism was not quite this bad in 1939 is revealed by a study of a group of college students who, in that year, professed strong disapproval of the governments of Germany and Italy which they labeled as fascist (11; 12) These students were in substantial agreement that the chief characteristics of fascism in Europe included rule by force and dictatorship, persecution of minorities, militarism, curtailment of religious, civil, and personal freedom, and placing the welfare of the state above that of the individual It is unfortunate that we cannot place too much faith in this scrap of factual evidence and generalize that these same students would also be in agreement when this characterization of fascism is applied to the American scene As a matter of record they probably would not recognize the presence of these same characteristics at home as indicative of fascism at all.[2]

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* I am very much indebted to Professor Ross Stagner of Dartmouth College and Professor Ralph Gundlach of the University of Washington, who read a draft of this paper and whose suggestions guided later revisions

[1] Editorial in the *Washington Post*, February 15, 1944

[2] See, for example, the studies of Edwards (13), Gundlach (17), Katz and Cantril (21), Raskin and Cook (29), and Stagner (34, 35)

It is true that Americans have, to some extent at least, been awakened to the fact that a denial of democratic principles, the persecution of religious and other minority groups, and fanatic nationalism, among other things, are a definite part of fascist ideology in other countries such as Germany, and a threat to the peaceful existence of any democratic state   We show no hesitation in denouncing these practices as "fascist" when they occur in Europe or somewhere else outside of the United States   But it is to a much lesser extent that we are aware that the presence of similar ideas and behavior in America constitutes an even greater threat to the peaceful continuation of *our* democracy, and symbolizes the development of an American brand of fascism   The American who scoffs at the Nazi doctrine of "Aryanism" is often the same individual who sees nothing wrong with the idea of keeping the Negro or the Jew or the Catholic in "his proper place"

There is, after all, not too much difference between the looting and burning of Jewish shops and homes in Berlin, Germany, and the looting and burning of Negro shops and homes in Beaumont, Texas   Yet we try and fool ourselves into believing "it can't happen here"   But it can   When German hoodlums beat members of minority groups in Europe, that is a characteristic of German fascism   When similar groups of American hoodlums beat members of minority groups in Boston, disturb their graves in Chicago, disrobe them in California, shoot and drag them from public trolleys in Detroit, defile their churches in New York, and burn their homes in Beaumont, then what does that indicate?   Surely not typical "adolescent stunts" as some have answered.   The *Washington Post* of June 20, 1943, in commenting upon the Beaumont disturbance in an editorial entitled "Naziism at Home," has this to say

The City of Beaumont, Tex, was the scene last week of another eruption of one of the ugliest aspects of American life   In an attempt to lynch a Negro accused of rape, a mob invaded the Negro district, burned homes, wrecked and looted shops   Two men were killed   State militia were compelled to impose martial law on the community

There is a terrible reminder in this occurrence that the bestial spirit which became dominant in Germany is also latent in the United States   *Naziism is confined to no nationality   It is an attitude*   It finds expression in the denial of democratic principles, in the overriding of minority rights, in the absurd assertion of racial superiority   *It is even more menacing to our institutions when it manifests itself here at home than when it challenges us from overseas.*

What happened in Beaumont is not peculiarly Beaumont's shame   It is a shame which all America shares   We shall succeed in conquering nazism not simply by military triumphs, but by cleansing its poison from our own national blood streams [3] (Italics mine)

An investigation conducted by Professor Gundlach (17) provides some further evidence concerning the need for a reminder that the spirit of fascism is present here but unrecognized for the most part Dr Gundlach, with the assistance of Professors Fearing, Gilhousen, Lewin, Stagner, and Tryon, formulated a number of questions bearing upon social issues and submitted them to students at Berkeley and to Members and Associates of the American Psychological Association in attendance at their annual meeting in Palo Alto in 1939   The questions were all related to the "social and political struggles current among socialism, political democracy, and Fascist dictatorship" (17, p 620)

In a discussion of the answers obtained to the above questions, Professor Gundlach makes a point which is supported by and neatly summarizes the essence of a number of other investigations· "Apparently the more fascistic ideas and attitudes one has, the less one recognizes them as fascistic" (17, p 620)   Now this is a simple point, but it is also an extremely important one   The implications are these· Many people may react negatively to the label "fascism" and yet accept the principles of fascism which the label would logically include, the embracing of fascist ideology and the possession of fascist attitudes does not necessarily involve any recognition of their real nature

There are a number of studies bearing upon this point   Stagner has reported, for example, that in one group of subjects, 75 per cent indicated a strong antagonism to the word "fascist," yet many of these same subjects endorsed "quite uniformly all of the opinions characteristic of the fascist movement of other countries" (37, p. 172)   Raskin and Cook (29) found that in a selected group of 33 subjects with extremely favorable attitudes toward fascist principles only two endorsed the statement· "Fascism is the form of government most capable of solving our national problems "   The other 31 subjects, despite the fact that they disapproved of this

[3] That recognition of the presence of fascist attitudes in this country is the result of events such as this rather than the educative process leaves much to be desired   Is fascism a disease to be treated only after it has reached the epidemic stage?   Perhaps plans for "exporting" an educational system and content to Europe and Asia for the purpose of "re-educating" the natives should be given a preliminary trial here

statement, proceeded to agree with many of the basic principles of fascism   In other words, these investigations indicate that there are a number of people who believe that fascism would be a fine thing if only it had some other name   And this is not an unusual finding· Katz and Cantril (21), Menefee (26), and Edwards (13) report similar evidence concerning the differential response to the label "fascism" and the principles which the label subsumes [4]

<div align="center">II</div>

In an attempt to provide further evidence on the subject of latent fascist attitudes, approximately 250 residents of a Midwestern city were given a number of statements in April of 1941 and were asked to check the degree to which they agreed or disagreed with each one [5]   In general, a high score, $i\,e\,$, a great degree of agreement with the statements, would indicate that one believes

1   That the main function of education is to teach children to be obedient to authority
2   That private schools should either be abolished or restricted so that the control of education is largely in the hands of the federal government
3   That academic freedom is all right in principle, but that it is no good in practice
4   That "superior races" (and I here use the words in quotes but they did not appear so in the scale) are justified in dominating "inferior races" by force
5   That the right to vote should be restricted to propertied classes
6   That a strong-man government is better than a representative government
7   That, in general, people are incapable of determining what is and what is not good for them
8   That all political parties except the Democratic and Republican should be abolished
9   That women are inferior to men
10   That the place of women is in the home
11   That birth control information should be restricted and women encouraged to have more babies

I don't think there is any need to complete the list: the questionnaire is described in detail in another study (13)   But the similarity between these beliefs and those *officially* advocated by

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[4] Nor is the discrepancy between reactions to political labels and principles limited to fascism   Hartmann (20) found some years ago that the typical Pennsylvania voter in his study preferred the Socialist platform and the Republican ballot

[5] The subjects were all adults living in the immediate area of Akron, Ohio   They were obtained through the cooperation of students in an advanced social psychology course at the University of Akron   The subjects, as far as the students who secured them could determine, were unaware of the true purpose of the study   Instead they were led to believe that the investigation was attempting to check upon certain opinion poll results   The subjects ranged in age from 20 to 67 years, had incomes from under $1,000 to over $20,000, and represented various occupational and political groups

admitted fascists should be evident to those familiar with various aspects of fascism [6] If so, it should also be evident that an American who is in agreement with all of these items is a very likely candidate for a fascist movement in the United States   As a matter of fact all of the statements which were used in the survey were selected so as to indicate sympathy for fascist principles, but without reference to the label "fascism " [7]

Before presenting the results obtained and comparing them with those of a similar study by Professor Stagner, perhaps I should emphasize that agreement with one or two or even more of the statements listed above or with others included in the survey does not necessarily justify labeling an individual a fascist. I think it is possible, however, to follow Allport's argument concerning the *principle of equivalence of stimuli* (3, p 280) and state that the greater the number of items accepted, the more generalized and favorable the attitude toward fascism   Another complicating factor is that the numerically same score made by two different individuals may not mean the same thing [8]   One subject may show relatively weak approval of a large number of items and the second may approve fewer fascist principles but approve more intensely those he does approve.   These limitations, however, are not peculiar to this scale but to all scales of this sort

Offsetting these weaknesses, to a limited extent, is the fact that the split-half reliability of the entire group of statements after an

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[6] Ziemer (43) and Mann (25) discuss some of the German fascist beliefs and practices in the field of education (Items 1, 2, 3)   The belief in racial superiority (Item 4), in an elite ruling class (Item 5), in the Fuhrer principle (Item 6), and in the ignorance and stupidity of the masses (Item 7), should be familiar aspects of German fascism to most readers   With respect to political parties (Item 8), the Nazis, of course, have abolished all but *one*   The position of women in Nazi ideology (items 9, 10, 11) is indicated by the slogan "Kinder, Kuche, Kirche "

Mumford (27) presents a very brief but clear picture of fascist ideology   The books of Abel (2) Deuel (9), Kolnai (22), Neumann (28), and Shirer (33) are a few of the many that deal with various aspects of the principles and practices of fascism as expressed in this list of statements

[7] It is not likely that the people who answered this questionnaire recognized the statements or their answers to them as bearing upon the question of fascism   According to Gundlach (17), this would particularly apply to those with high scores, *i e ,* those who were in agreement with many of the items   My general impressions, as a result of interviews with people who have filled out the questionnaire, agree with Gundlach's contention those with very high scores tend to have very little insight into the purpose of the questionnaire, those with very low scores, however, do seem to have some realization that "anti-democratic" attitudes are being investigated

[8] Scores were determined by having each subject respond to each item with one of five alternatives ranging from "strongly agree" to "strongly disagree " The various alternatives are item weights or scores on a scale ranging from 1 to 5, a high score in all cases indicating agreement with the particular aspect of fascism under consideration   The total score for each subject is the sum of his item weights

item. analysis was 84. This would seem to support the belief that
attitude toward fascism is a generalized pattern   Further evidence
in favor of this view is to be found in a factor analysis of responses
to a similar scale measuring fascist attitudes reported by Stagner
and Katzoff (36)

Having mentioned some of the difficulties involved, I would like
to state that for the purposes of the discussion which follows it is
sufficient to note that strong disagreement with every one of the
statements would result in a score of 22   This is the greatest amount
of disagreement with fascism that a person could register in terms
of statements submitted   When, therefore, I speak of various
groups as showing greater or lesser agreement with fascism, it is
with reference to the discrepancy between their mean scores and
this base of 22

III

Consider first the relationship between age and acceptance of
fascist principles.   The main trend is a greater agreement with
increasing age, the most significant shift occurring somewhere close
to 40 [9]   But age is not a factor unrelated to other considerations
The same data show that adults who are Independents, politically
speaking, tend to be less in agreement with the statements than
either consistent supporters of the Democratic or Republican parties
Taking into account the results obtained with college students and
reported elsewhere (13), it would seem that maturity, as such, has
different effects on the attitudes of Democrats and Republicans
toward fascism than on Independents   Adult Democrats and
Republicans tend to be more in agreement with fascism and adult
Independents tend to be more in disagreement than their younger
counterparts   This trend is in accord with Stagner's finding that
adults, in general, tend to be more extreme in their opinions than
college students   The oft-heard generalization that age is accom-
panied by increasing conservatism needs qualification in the light
of these findings.   The opinions of adults, it is true, may become
more conservative but they may also become more liberal   The

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[9] The means of the 20–29- and 30–39-year-old groups are 56 6 and 57 4, respectively,
while those of the 40–49- and 50–65-year-old groups are 64 7 and 67 4, respectively   A
more detailed statistical analysis of this and other trends has not been included in this
report, but may be obtained upon request

direction in which they tend may be a function of the attitudes they held as youths as well as other factors [10]

In terms of occupational groups, the greatest degree of acceptance of fascist principles was found for housewives (M=66 7) and least for social workers (M=51 3) and elementary-school teachers (M=54 5) Rural women, by the way, ranked first in Stagner's study. These facts are, of course, susceptible to a number of different interpretations, but a simple one stemming from the work of Cannon (5) and others impresses me as worth serious consideration here

Cannon (5) has discussed in some detail the tendency of the organism to maintain certain physiological constant states and to preserve equilibrium. This process Cannon speaks of as *homeostasis.* Guthrie (18) has extended the notion of homeostasis to include learned behavior patterns It is his contention that there are also certain psychological constant states, such as habits, which the organism tends to preserve once they have been learned and become part of its behavioral tendencies [11] Fletcher (14) has expressed a similar point of view and Allport (3; 4), I believe, is taking a related position when he speaks of ego-defense and functional autonomy.[12] Applied to the field of attitudes, this theory would imply that one is opposed, attitudinally, to those things which offer real or potential threat to the ego and all that goes to make it up, including the norms and values which have been introcepted as well as the attitudes, traits, and habits which have been learned— and which may be more or less functionally autonomous Ideologies and labels as well as situations which threaten to disturb the equilibrium of these psychological characteristics of the organism would tend to result in negative (ego-defensive) reactions

In the present instance this tendency is most clearly shown when the responses of housewives are compared with those of women

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[10] *Cf ,* in this connection, Gundlach's (16) study of the relations of age, income, emotional stability, and political opinions

[11] See also Raup's doctrine of complacency (30)

[12] Russell (31, p 91), in a discussion of desires, states that while B may at first be desired as a means to A, " . B comes to be desired in the same sense in which A was previously desired It may even happen, as in misers, that the desire for B completely displaces the desire for A, so that B, when attained, is no longer used as a means to A This, however, is more or less exceptional In general, the desire for A persists, although *the desire for B has a more or less independent life"* (Italics mine) This is similar to Woodworth's (42) statement that mechanisms sometimes become drives It is Allport (2), however, who has done most to develop a theory of the "transformation of motives" under the concept of "functional autonomy "

outside the home working in various occupations   The principles
in the scale which pertain directly to the status of working women
(such items, for example, as. Generally speaking, women are less
intelligent and efficient than men; Women have more ability and
are more efficient at tasks around the home and as a result their
rightful place is in the home and not in the business world) are
perceived by working women as expressing a point of view in
opposition to their own frames of reference and tend to be rejected.
They are rejected not because working women necessarily perceive
these statements as a doctrine or element of fascism, but because
these statements offer a potential threat to the role of these women
as workers   Housewives, on the other hand, tend to agree with
these items since they are not perceived as offering any threat to
their own conception of their role as housewives   We can perhaps
see the more general implications of this particular interpretation
after considering two other aspects of the data

IV

One discrepancy between this study and that of Stagner's is in
the greater degree of acceptance of fascist principles which I found
for one union group (factory employees who were largely drawn
from the ranks of rubber workers) as contrasted with his finding
of a rather low mean score for another group of union members
(milkmen)   Contrary to the opinion of some liberals, the moral
seems to be that membership in a labor union is no sure guarantee
of antagonism toward fascism   We may, to be sure, in terms of
the theory advanced, expect to find greater rejection of fascist princi-
ples among labor groups as long as these principles are perceived
as threatening the status of organized labor itself, as in the case of
working women who reject fascist doctrines which threaten their
status   But, unfortunately, this does not of itself offer any assur-
ance that union members are going to reject or oppose fascist princi-
ples in the sphere of education, religion, treatment of minority
groups, political parties, freedom of speech, etc
Perhaps too many well-intentioned pressure groups, attempting
to sway American public opinion against fascism, give the impres-
sion that fascism is primarily this or that, whether this or that be
anti-labor, anti-Semitism, or anti- or pro- something else   The
threat of fascism to each group's own dominant values is over-
emphasized to the neglect of fascism's danger to other equally

important values   These groups forget that fascist ideology is not simply a philosophy applied to limited areas or institutions within a culture, but rather an ideology which permeates all of a culture once it takes roots and begins to develop   Fascism in Germany, for example, has shown no tendency to be influenced by the wishful thinking of those who embraced it out of admiration for one particular aspect or as a solution to one particular problem and with the belief that all other distasteful aspects would be dropped in practice   Our own American "limited" fascist should take note of this fact now

A second discrepancy between the present study and that of Stagner is concerned with the relation of income and acceptance of fascism   Stagner found that both the lower-income group (under $1000) and the higher-income group (over $5000) tended to be more sympathetic toward fascism than the middle-income group   My findings, however, reveal a different relation, the lowest-income group was least sympathetic and as one goes up the income scale the groups become progressively more sympathetic   The analogy which Stagner offered for his findings was that of a parallel between the development of fascism in Germany and Italy where the finances for these movements came from the upper-income group and the "fascist militia" from the lower-income group   The wealthy needed a strong state to protect their wealth from the inroads of the socialists, while the poor supported it because of a "nothing-to-lose" attitude   Related factors, Stagner believes, might be lack of education and understanding of the economics of society [13]   I think this statement can be complemented and clarified by the principles advanced earlier.

V

It is my belief that genotypically the adherents of any social movement such as fascism are to be found in those groups which are frustrated and dissatisfied with the status quo.[14]   But something more is needed; this principle alone does not explain why various

[13] Professor Stagner, in a personal communication, has suggested that in terms of the "ego-defensive theory" offered earlier lies the explanation of our apparent differences   The particular values set up in any questionnaire (to provoke this defensive attitude) must inevitably be a sampling from the culture and will not be equally applicable to all strata in the culture   The values which I have listed, Stagner believes, happen to be much more characteristic of our "middle class" than of workers   Hence ego-defensive reactions are not as pronounced in the lower-income group as they might otherwise be

[14] Sherif's (32) analysis of social norms points in this direction   Dollard (10) and Maier (24) also discuss aspects of frustration theory and behavior patterns which develop under conditions of frustration   Cf also Cantril (7), and Abel (2)

groups, dissatisfied and frustrated as they may be, should view one social movement as a solution to frustration and tension rather than another Why, for example, do some groups turn to fascism and others to communism or some other "ism"?

A possible but probably oversimplified answer to this question is to be found, I believe, in terms of the explanation offered earlier. The supporters of any social movement, it is true, tend to come from those groups which are already frustrated or anticipate frustration in some respect and which see in this particular movement a means of restoring equilibrium or obtaining relief for their anxiety Opposition to this same social movement, on the other hand, will tend to come from those who view this movement as a real or potential source of frustration, i e , a movement which will disturb accepted values and attitudes

Assuming that basically this analysis is correct, the problem for the propagandist for social change thus becomes one of capitalizing upon existing frustrations or of bringing about conditions which produce tensions and anxieties in large segments of the population and then proposing remedies for the dissatisfactions created A second consideration is to minimize the danger of the proposed remedies to the established values of other satisfied groups Consider how these principles were used by the National Socialists in their operations in Germany

VI

In 1930 in Germany the essentials for winning the people over to the support of the National Socialist program were already present [15] There was the authoritarian tradition according to which every man had his rank and deferred to superiors and was masterful with inferiors. There was the Hegelian mystical notion of the state as the supreme end of all individual lives There was the strong tradition of the military life as the best life There was anti-Semitic feeling in many parts of Germany There was a definite feeling that German culture was superior to that of any other nation. All of these factors had deep historical roots

There was also in the immediate situation in Germany a strong tendency upon the part of the laboring classes to move in the direc-

[15] The following analysis is taken almost verbatim from an unpublished manuscript by E R Guthrie and the writer Professor R Taylor Cole of Duke University read and revised the original draft

tion of various brands of socialism which promised economic security   This, in conjunction with the threats of the more radical elements of the left wing to introduce social changes in the status quo, by force if necessary, was cause for general anxiety among the upper classes.

At the same time, the lower middle classes, which considered themselves the chief carriers and guardians of German "culture" and which had been most adversely affected by changes in the economic cycle, reacted against both organized labor and the upper classes   The lower middle classes were resentful of the upper classes because they considered this group to be partially responsible for their own lowered economic status   At the same time the lower middle classes viewed organized labor with alarm because they considered this group to be proletarianizing German culture and a threat to the established social status of the middle classes

This was Germany in 1930, and these were a few of the situations and attitudes which the Nazis could exploit through propaganda. They damned the Jews and linked them with capitalism   They condemned the communists and linked them with internationalism. They damned Versailles and linked it with the breakdown in German nationalism   They promised that National Socialism would correct the situation by making Germany strong and united. National Socialism would permit Germany to achieve her national ambitions and, in addition, provide economic security for all. This was the Nazi answer to German conflicts and frustrations.

To gain supporters for their program from groups with conflicting values, the Nazis, of a necessity, varied their appeals   They appealed to the army caste by blaming Germany's defeat in 1918 on the home front and by promising expansion of the German Army and adding to its powers   They appealed to the industrialists by promising that labor unions and communists would be controlled   They appealed to workers by promising that they would be given increased economic security   But their greatest appeal was to the lower middle classes which they promised to protect economically from the "capitalists" (right) and socially from the "proletarians" (left)

VII

What are the values in America which our native fascists intend to "save" for us, and who are the groups from which they intend

to "protect" us? We get no clear-cut response from the fascists for, like their German teachers, they have learned to vary the details of their propaganda to fit the particular audience addressed But there are three values which they speak of quite often· "White supremacy, Christianity, and 100-per-cent Americanism" The particular groups which are singled out as threatening these values are also varied to fit in with the immediate situation. In the south, the fascists whisper about the Catholics and talk openly about the Negroes, in the west, the Japanese and Mexicans are honored, in Massachusetts, it is the Jews, and, in most any section of the country, it is the current administration in Washington which serves as the scapegoat.[16]

In America too, we thus see that the fascists attempt to capitalize upon existing tensions and attitudes to canalize public opinion against our form of government, to divide and thus conquer Ample illustrative material to document this point can be found in detailed studies of American fascism in action, such studies, for example, as John Roy Carlson (8) has reported It is true that efforts to extend democracy in any direction will be viewed by many groups as a threat to accepted values and, consequently, as a real or potential source of tension And it is these groups which the fascist-minded, both native and foreign, hope to rally around their doctrines Fascism, the American variety, will be the protector, the savior, as in Germany.

Our entrance into the war, unfortunately, has done little to blot out these attitudes which are latently, and in some instances patently, sympathetic to the fascist cause. The symptoms of fascism are with us now, they are serious and sufficiently advanced to war-rant careful consideration and study. The beatings of Jewish chil-dren—because they are Jewish—in certain sections of Boston by organized gangs should not be lightly dismissed as "adolescent outbreaks" "Bishop G Bromley Oxnam of the Boston area of the Methodist Church declares that this is no mere hoodlumism but part of an incipient Fascist pattern. 'I was in Germany,' he says, 'when these things began there. It is the same pattern in which organized gangs beat up a scape-goat race whether they be Jews or anyone else' "[17] Yet despite the fact that similar manifestations

[16] A recent pamphlet, *The A B C's of scapegoating* (1), describes the techniques involved here
[17] *Washington Post,* November 15, 1943

of the same pattern have occurred in other sections of the country, how many Americans recognize, as does Bishop Oxnam, the meaning and significance of the pattern?

VIII

What is the solution? In the treatment of a disease, an ounce of prevention, it is sometimes said, is worth a pound of cure. But before a disease can be prevented it must first be recognized and diagnosed. It is so with fascism The symptoms must be described, made apparent, so that the layman can recognize them as easily as he does the symptoms of a case of measles or smallpox.

Psychologists and other social scientists must, I believe, take the lead in examining and diagnosing in terms of the racial, political, social, and economic attitudes involved the diseased areas in many American minds which have already been infected by the fascist virus If research can be taken as an indication, then it must be admitted that up to the present time psychologists at least have failed to give very much attention either to the infection or its source. A survey of the literature shows a paucity of studies on fascist attitudes in contrast to the very large number of investigations dealing with such innocuous topics as attitude toward capital punishment.

In his Presidential Address to the Society for the Psychological Study of Social Issues in 1937, Goodwin Watson stated.

If an epidemic as injurious to physical health as Fascism may be to the health of our democracy, threatened this country we may believe that research would be extensively established Thousands and millions of dollars would be poured into laboratories and sanitation programs Graphs would chart the rise or fall in number of cases week by week in every area affected We are not seriously behind medicine in our ability to diagnose the syndrome of Fascism, but we can hardly expect the same financial support for preventive research (41, p 6)

I suspect, as Watson does, that social scientists do or could agree upon many of the basic principles and facets of fascism. Yet lack of funds for preventive research cannot solely explain our failure in making Americans fully aware of the essence of fascism And we are not without responsibility in contributing to the confusion surrounding the meaning of the term by remaining silent and refusing to enumerate specifically, when and where we can, the attitudes and beliefs which are characteristic of fascist tendencies The dangers inherent in the situation as long as Americans are

confused by the use of the term "fascism" and lack any clear under-
standing of what it means behaviorally have been pointed out in
a *Washington Post* editorial of February 15, 1944   I quote the
following paragraphs

> We happen to have our own concepts of fascists and communists   We have
> learned, however, through harsh experience that these concepts are peculiar to
> ourselves, jibing with no others
>
> The carelessness with which this term (fascism) is used is the more unfortunate
> in that there are undoubtedly real fascist tendencies at work on the American scene
> They need to be identified, isolated and combatted   They gain protective coloration
> and a dangerous immunity from the indiscriminate application of "fascist" as an
> epithet to persons and movements which bear only superficial resemblance to
> them [18]   Our orators might usefully bear in mind what happened to the lad who
> orated "Wolf, wolf," too frequently   We can ill afford to become apathetic about
> real fascists when they spring up among us

IX

The implications of the points raised throughout this paper can
be brought together in the following summary   In brief, the psy-
chological studies mentioned, taken in conjunction with the patterns
beginning to break out in various sections of the country, indicate
that many people are opposed to fascist ideology only as a stereo-
type, their allegiance to democracy is only verbal homage   The
label "fascism" evokes an emotional rejection of the label, but not
a critical rejection of the principles of fascism for which the label
stands   These fascist principles, unlabeled, fail to arouse democratic
frames of reference, either because such frames of reference are
lacking or because the principles are not perceived and recognized
as being incompatible with a belief in democracy   There are some
who believe that the former is the case, that education, the press,
movies, and radio, the church, and other of our institutions have
failed to establish any profound belief in democracy in the majority
of our people   This is an admission of complete failure and the
possibility that this is true provides *pleasant* food for thought only
to the more fascist-minded [19]   Let us try and take refuge in the
second alternative

[18] There is a real danger here   In the field of propaganda and opinion the pot may
often call the kettle black without drawing attention to or arousing suspicion of its own
coloring
[19] The facts must be faced—however unpleasant   A summary of studies bearing upon
this problem can be found in an article by Lippitt (23, p 122) from which the following
quotation is taken   "These and other studies lead to the generalization that in our present
American culture groups of children ranging from the preschool age up through the college
years seem often to react with satisfaction to adult domination of their group life   There

Assuming that we have made progress in developing a citizenry that believes in democracy but that the difficulty at the present time lies in the inability to recognize beliefs and practices which are contrary to a democratic conception of society, is a confession of only partial failure The problem now is to "generalize" and extend the notion of democracy We should realize, of course, that efforts in this direction are going to result in some conflicts and tensions and reactions upon the part of individuals and groups who perceive any such movement as threatening their values, and we must endeavor to find ways and means of minimizing these. But this should not prevent us from undertaking the task of bringing about a sharp recognition *now* of fascist and *other* ideology which is contrary to this extended notion of democracy Such contrary attitudes, beliefs, and behavior expressions of these attitudes and beliefs must be clearly depicted so that they may be viewed in perspective This is particularly needed in the case of anti-democratic ideology in its more subtle form in education, in religion, in restrictions upon voting, and in racialism and chauvinism And the pretexts and rationalizations under which fascism and other anti-democratic sentiments so often take cover need also to be exposed Fascist propaganda, we must never forget, changes its external appearance to fit the immediate situation

Goebbels and his associates have put the proverb about the rose into its correct psychological form: a rose by any other name does *not* smell as sweet And in the semantic jugglings of fascist propagandists lies the possibility that the olfactory sense of America may be momentarily dulled by such verbal deodorants as "100-per-cent Americanism, the savior of Christianity, and the champion of white supremacy "

REFERENCES

1 *A B C's of scapegoating* With a foreword by Gordon W Allport Chicago Central YMCA College, 1944
2 ABEL, T F *Why Hitler came into power* New York Prentice-Hall, 1938
3 ALLPORT, G W *Personality A psychological interpretation* New York Holt, 1937
4. ALLPORT, G W The ego in contemporary psychology *Psychol Rev*, 1943, **50**, 451–478
5 CANNON, W B. *The wisdom of the body* New York Norton, 1932   •
6 CANTRIL, H , ASSISTED BY GAUDET, H , & HERZOG, H *The invasion from Mars* Princeton Princeton Univ Press, 1940
7 CANTRIL, H *The psychology of social movements* New York Wiley, 1941

are still other observations to indicate that many of these youth react even with considerable dissatisfactions to what group workers and progressive educators would call democratic leadership "

8 CARLSON, J R *Under cover* New York Dutton, 1943
9 DEUEL, W R *People under Hitler* New York Harcourt, Brace, 1942
10 DOLLARD, J, DOOB, L W, MILLER, N E, MOWRER, O H, & SEARS, R R *Frustration and aggression* New Haven Yale Univ Press, 1939
11 EDWARDS, A L Studies of stereotypes I The directionality and uniformity of responses to stereotypes *J soc Psychol*, 1940, 12, 357–366
12 EDWARDS, A L Four dimensions of political stereotypes This JOURNAL, 1940, 35, 566–572
13 EDWARDS, A L Unlabeled fascist attitudes This JOURNAL, 1941, 36, 575–582
14 FLETCHER, J M Homeostasis as an explanatory principle in psychology *Psychol Rev*, 1942, 49, 80–87
15 GUNDLACH, R H Confusion among undergraduates in political and economic ideas This JOURNAL, 1937, 32, 357–367
16 GUNDLACH, R H Emotional stability and political opinions as related to age and income *J soc Psychol*, SPSSI Bull, 1939, 10, 577–590
17 GUNDLACH, R H The psychologists' understanding of social issues *Psychol Bull*, 1940, 37, 613–620
18 GUTHRIE, E R *The psychology of human conflict* New York Harper, 1938
19 GUTHRIE, E R, & EDWARDS, A L *Psychological warfare* Unpublished manuscript, 1943
20 HARTMANN, G W The contradiction between the feeling-tone of political party names and public response to their platforms *J soc Psychol*, 1936, 7, 336–357
21 KATZ, D, & CANTRIL, H An analysis of attitudes toward fascism and communism This JOURNAL, 1940, 35, 356–366
22 KOLNAI, A *The war against the west* New York Viking, 1938
23 LIPPITT, R The morale of youth groups *In* Watson, G (Ed), *Civilian morale* New York Houghton Mifflin, 1942
24 MAIER, N R F The role of frustration in social movements *Psychol Rev*, 1942, 49, 586–599
25 MANN, E *School for barbarians* New York Modern Age, 1938
26 MENEFEE, S C The effect of stereotyped words on political judgments *Amer sociol Rev*, 1936, 1, 614–621
27 MUMFORD, L *Men must act* New York Harcourt, Brace, 1939
28 NEUMANN, F L *Behemoth The structure and practice of national socialism* New York Oxford Univ Press, 1942
29 RASKIN, E, & COOK, S W A further investigation of the measurement of an attitude toward fascism *J soc Psychol*, 1938, 9, 201–206
30 RAUP, R B *Complacency The foundation of human behavior* New York Macmillan, 1930
31 RUSSELL, B *Philosophy* New York Norton, 1927
32 SHERIF, M *The psychology of social norms* New York Harper, 1936
33 SHIRER, W L *Berlin diary* New York Knopf, 1941
34 STAGNER, R Fascist attitudes An exploratory study *J soc Psychol*, 1936, 7, 309–319
35 STAGNER, R Fascist attitudes Their determining conditions *J soc Psychol*, 1936, 7, 438–454
36 STAGNER, R, & KATZOFF, E T Fascist attitudes Factor analysis of item correlations *J soc Psychol*, 1942, 16, 3–9
37 STAGNER, R *Psychology of personality* New York McGraw-Hill, 1937
38 *Washington Post*, Washington, D C, June 20, 1943
39 *Washington Post*, Washington, D C, November 15, 1943
40 *Washington Post*, Washington, D C., February 15, 1944
41 WATSON, G Orientation *Special Supplement to the SPSSI Bull*, 1937, 2, No 1
42 WOODWORTH, R S *Dynamic psychology* New York Columbia Univ Press, 1918.
43 ZIEMER, G A. *Education for death* New York Oxford Univ Press, 1942

THE LITERATURE ON PANIC

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I T is the purpose of this article to consider briefly some of the literature on mass panic with a view to summarizing the present state of knowledge concerning its causes and prophylaxis

The characteristic descriptive features of mass panic, by which it can be recognized, are rather generally agreed upon by students of the phenomenon These consist of items such as collective surprise and shock, suggestion, mass imitation, mental contagion, shattering of group bonds, wild flight. Similarly, various associated features are usually noted: hallucination, heightened imagination, tension, insecurity, uncertainty, confusion, anxiety, loss of faith in leaders It is with these terms that students characterize panic.

While there is this general agreement on the descriptive features of panic, opinion is not so homogeneous concerning its causes and the means by which its outbreak can be prevented The extent of agreement and disagreement concerning its causation and prophylaxis among students of panic can be indicated by a discussion of those two problems

CAUSATION

Although different writers present different states of causative influences and give different weights to identical influences, still it is possible to summarize those causative influences which the majority of the writers consider to be of greatest importance for precipitating panic.

For example, conditions of the following type are often named as having a direct or indirect influence upon the outbreak of panic: "fatigue," "bad nourishment," "exhaustion," "intoxication," "bad health," "previous shock," "physical depression." Although different students emphasize different conditions, it is clear that each condition is one which is physically weakening to men It is helpful, therefore, to group such conditions into the general class of conditions which *physically weaken men*

The exact role played by such conditions in precipitating panic is never designated exactly, but it is frequently suggested that they work by weakening men's ability to think clearly and rapidly.

That a condition of *lessened mental ability* is an important factor in panic causation is declared or implied very frequently A variety of factors related to inability to think clearly or rapidly are named; for example "lack of intelligent knowledge of one's duty," "confusion," "doubt and uncertainty," "noise and distraction," "lack of critical ability," "crowd conditions "

Related to lessened rational mental activity is a set of factors which might be termed. *high emotional tension and heightened imagination* The specific terms by which these factors are referred to are "anxiety," "feeling of isolation," "insecurity," "emotional tension," "sharpened imagination," "building up of fears by imagination," "hallucination," "illusion " Most students of panic consider that one or more of such influences play a crucial role in causing panic. There is a rather wide agreement, then, that high emotional tension and heightened imagination, in some form or other, are central causative factors

Closely related to these are a set of three occurrences which are widely held to be important causative influences. These are: *suggestion, collective imitation,* and *rapid mental contagion* These serve as mechanisms by which the panicked group is split asunder and reduced to a bunch of fleeing individuals Lessened ability to act rationally and the presence of high emotional tension, combined with heightened imagination, are held to result in highly suggestible persons—who by reacting indiscriminately to suggestion through imitation and rapid mass contagion precipitate the panic

There is another factor which is frequently held to be of primary causative importance. That is the *breakdown of faith in the leader* This is variously expressed as· "lack of confidence in leaders," "lack of regimental leadership," "failure of the leader," and so on. Presumably failure of confidence in the leader renders individuals more susceptible to suggestions from persons other than the constituted leader, and thus more readily permits the related mechanisms of indiscriminate suggestion, imitation, and mass contagion to operate in the group.

There is another factor which is directly mentioned by several writers but probably assumed by all This can be designated as: recognition that one's life or body is in *extreme danger*. This factor is variously expressed as. "feeling that life is threatened," "face to face with danger," "consciousness of powerlessness to stem the inevitable," "the occurrence of crisis," and so forth The essentially flight-for-life character of panic is recognized

The various major factors agreed upon as relevant to panic causations are, then, the following

1. Conditions which weaken individuals organically and thus are conducive to lessening of rational mental activity.
2. A state of lowered mental ability with lessened capacity to act rationally
3. A state of high emotional tension and heightened imagination which disposes individuals to act impulsively rather than rationally
4. Mechanisms of suggestion, mass imitation, and rapid mental contagion act to precipitate actual flight and panicked reactions These mechanisms are brought about largely by lessened ability to act rationally, by high emotional tension, and by heightened imagination
5. Loss of faith in the leader which renders individuals more susceptible to suggestions from persons other than the leader of the group
6. As a dominant condition underlying all the above, there is the awareness that one's life is in great danger

PROPHYLAXIS

Methods for preventing or stopping mass panic have been suggested Although different students put their faith in different methods, still several methods are widely recognized as being of value

The importance of *creating intelligent leadership,* combined with creating faith in that leadership, is widely suggested as the chief method for preventing panic. The importance of strong leadership and faith in that leadership are variously expressed; but most students consider that these can go a long way toward preventing the occurrence of panic

A related preventative method suggested is the *creation of discipline in the group*. Consequently a few students have suggested the building-up not only of obedience and general disposition to cooperate but also of rather automatic bodily habits This is so that under conditions of danger the group members can act cooperatively without having to think consciously and clearly about their interrelated activities

Over against this emphasis upon the building-up of automatic reactions, some students lay greater emphasis upon *intelligent and conscious reactions* They suggest that one way to lessen the possibility of panic is for group members to have an intelligent knowledge of their duties and be informed of what is going on

Another way of preventing panic is occasionally noted, but presumably is assumed by many more students This is that all *physically weakening factors should be avoided or minimized.* Examples of such weakening factors are sickness, intoxication, heat exhaustion, and the like

Another technique for preventing panic is occasionally mentioned This involves *distracting the attention of the group* members so as to take their minds off their fear and thus reduce emotional tension The assumption is that if the men can temporarily forget about the danger they face they will be in a state less conducive to producing panic reactions Various ways of distracting attention are suggested, such as engaging the men in physical, habitual, and mental activities—that is, keep them so busy that they have no time to think of the danger

These five methods—leadership, discipline, intelligent knowledge of duty, avoidance of physical weakness, and distraction from danger—seem to be the only methods more or less widely agreed upon as having much value for preventing panic

CRITICAL REMARKS

While there is much agreement among students with regard to the listing of causative factors and the methods suggested to combat panic, in many instances students place emphasis upon different causative factors and stress divergent preventative methods.   .

This rather great difference in opinion and emphasis can be shown by reducing to tabular form the positions taken by various students with reference to both the causative factors and the methods of preventing or stopping panic (Table 1)

TABLE 1

NAME	CAUSATIVE FACTORS	PROPHYLACTIC METHODS
Andrews	The feeling that life is threatened Lack of confidence in leadership and comrades Bad health and physique	Good health Good physique Confidence in leaders and in comrades
Brousseau	Fatigue Expectancy of battle Sharpened imagination Mental contagion Noise, distraction, cries Imitation High emotional tension Physical conditions such as bad nourishment and intoxication Moral conditions like isolation, the building-up of fears by imagining things	It is necessary that a strong will from outside the panicked group intervene in order to stop the panic, and only then after there has occurred a partial exhaustion of the emotional tension
Cantril	Lack of critical ability Role of personal maladjustment The cultural context in which the situation is set The threatening of some commonly accepted value with no certain elimination of the threat in sight	Creation of critical ability Scepticism Knowledge But basically the economic and social conditions of the underprivileged — conditions from which emotional insecurity stem—must be altered
Coste	Suggestion Lowering of psychological resistance through emotion and fatigue Surprise Imitation Collective contagion Lack of confidence in leader	Confidence in leader is needed Troops well organized and disciplined can better stifle terror
Cygielstrejch	Fatigue, which weakens mental ability Physical depression Heightened imagination Moral contagion Lowered organic conditions Distraction Crowd conditions Expectancy and anxiety Loss of discipline Failure of honor, duty, solidarity, pride	Stresses preoccupying the men with some job so as to absorb their attention and relieve anxious strain
Eltinge	Crowd conditions Unexpected modification in the physical or moral conditions affecting the group (this is the real cause), which results in diminishing or destroying resistance to suggestion Hallucination, illusion, contagion The state of predisposition favorable to contagious suggestion is brought about by such things as treachery, scarcity of arms, absence of commanders, expectant waiting, rage, physical depression, moral depression	The central importance of joint responsibility and confidence of group members As near perfect military organization as possible so as to prevent surprise, breakdown of supplies, and the like
Farago (German military literature)	Immediate causes feeling of insecurity in fog or darkness, a real or imaginary threat, lack of information concerning the enemy's whereabouts, frequent alarms and troop transfers, contradictory commands, vacillating leadership, prolonged waiting at rail and road junctions, exhaustion, appearance of unexpected weapons	Discipline, education, indoctrination, habituation to the leader, and outstanding leaders

TABLE 1—*Continued*

NAME	CAUSATIVE FACTORS	PROPHYLACTIC METHODS
Kelland	Consciousness of powerlessness and futility to stem the inevitable	Vanity Self-respect Physical and moral discipline
La Piere	Occurrence of a crisis and lack of regimental leadership for that crisis Mimicry	The crucial role of regimental leadership and regimental training of the group
Le Meillour	Surprise is the most important factor Imitation Collective contagion Role of the mentally unadjusted individuals in precipitating panic Physically weakening conditions Bad nourishment, irregular sleeping, thirst, climate, drunkenness Retreat psychology Depression by too long a stay under continuous battle conditions Momentary depression Lack of intelligent knowledge of one's duty	Discipline is not a chief obstacle to the development of panic, more important is the soldier's knowledge of his duty
Maxwell	Loss of leader and the occurrence of contagious fear through "sympathetic induction of the emotions"	
Munson	Indirect factors fatigue, mental depression, doubt, and uncertainty Direct factors those which excite panic in persons already more or less susceptible—events usually unforeseen, unexpectedly, suddenly, and violently changing the current of thought Also certain psychological processes illusion, hallucination, suggestion, and contagion	Stresses devices to turn thoughts away from fear, making fear less than fear of punishment or contempt, example of leaders, avoidance of physical ills, advice, fatalism, moral support, proper information
Percin	Uncertainty—whose variations are surprise, isolation, silence, and obscurity Collective contagion, fatigue, hunger, previous shock or emotion The lengthy developmental period preceding panic	Action is effective in lessening fear only when it turns the attention away from the object of fear The action and example of the leader plays an important part in helping individuals triumph over fear
Rickman	The predisposing and specific cause of the panic is not clear Contributory factors, however, are group ties serve to keep in check the unrestricted expressions of the individual's emotional reactions—and the breaking of group ties breaks the support of the individual's self-reliance and brings about panic	Panic is best allayed by doing something for those one loves, also by preparation for crises by mental and physical activity The need for leadership and desire for guidance in action
Schmideberg	Loss of authority	It is essential to maintain authority to prevent panic

TABLE 1—*Continued*

NAME	CAUSATIVE FACTORS	PROPHYLACTIC METHODS
Stone	Panic is due to fear plus absolute confusion	Stresses the importance of building up automatic bodily habits Also the habit of quick imagination
Waelder	By failure of the leader, the individual is brought suddenly face to face with full danger, this so increases his fear that it turns to panic	

Even casual inspection of the listing of suggested panic causation and its prevention in Table 1 indicates that there is much divergence of emphasis and stress among students of panic.

Compare, for example, the opinions of Waelder, Schmideberg, Stone, and Percin regarding the causation of panic. Or note the emphasis placed by Le Meillour and Munson upon surprise, as against the factors stressed by Cygielstrejch and Brousseau, who apparently do not consider surprise fundamental to the occurrence of panic Similarly, Eltinge and Brousseau give heightened imagery and hallucination a central causative role, while Andrews and Stone do not Again, certain authors (Brousseau, Andrews, and Le Meillour, for example) emphasize certain physiologically weakening factors, while others (La Piere, Waelder) do not. Percin is the only author who makes specific note of a long developmental period preceding the actual outbreak of the overt panic Lack of specifically regimental leadership and training is emphasized by only a few students, notably Stone and La Piere

Similarly, with regard to the methods of prophylaxis stressed, note the differences between La Piere and La Meillour, and Munson Or note the somewhat different emphasis upon methods even when methods suggested are more or less the same—as with, for example, Coste, La Piere, Eltinge, Percin, Munson, and Rickman

The fact that different students emphasize somewhat different sets of causative factors indicates that actually the causation of panic has not yet been effectively determined, or that there are diverse kinds of panics

A number of "conditions" or "factors" have been observed to be present preceding and during the development of panics—surprise,

fatigue, heightened imagination, collective contagion, and the like. However, the fact that different sets of these factors are taken as more crucial than others by different students points to lack of genuine knowledge about panic causation One might illustrate this lack of genuine knowledge with an analogy from medical science If a man falls into a lake on a very cold night and catches pneumonia, people commonly say he has caught pneumonia because of freezing water and cold air Actually, these factors are not causative agents in a genuine medical sense The interaction of the physiochemical condition of the man's body and a certain type of bacteria constitute the real causation of pneumonia Presumably the part played by falling into cold water, while it entered into the causation, was a factor only insofar as it entered into affecting the physiochemical constitution of the man's body The situation would seem to be similar with regard to the "conditions" of mass panic—fatigue, loss of faith in leader, bad discipline, surprise, etc These are conditions of panic in the sense that freezing water and cold air are conditions for pneumonia. They are connected with the occurrence of pneumonia, but in the strict sense of causation they are not causative agents

The point can be brought out in another way The conditions of panic can be roughly classified into three categories: physiological, psychological, and sociological Physiological factors are fatigue, undernourishment, lack of sleep, toxic conditions of the body, and the like Psychological conditions are surprise, uncertainty, anxiety, feeling of isolation, consciousness or powerlessness before the inevitable, expectancy of danger Sociological factors include lack of group solidarity, crowd conditions, lack of regimental leadership in the group An effective statement of the mechanics of panic causation cannot be made by merely listing the factors entering into that causation when these factors are as diverse in character as they seem to be. A student seeking a genuinely effective statement of panic causation would attempt to find what is essential to these diverse conditions and tie these essential conditions into a dynamic statement of the development and outbreak of the panic occurrence

Furthermore, the conditions of panic which have been noted, because they are not genuine causative conditions, are conditions for more than just panic. That is to say, the conditions for panic which are listed in the literature are not conditions for panic specifically, they are also conditions for other kinds of closely related collective

phenomena Falling into freezing water is a condition for catching a cold, diphtheria, headache, pneumonia, and a dozen other ills. Similarly with the listed panic conditions Panic is a species of a genus which includes such collective nonrational phenomena as collective hysteria, collective fanaticism, collective exaltation, collective heroism, and the like Many of the conditions of panic which have been listed in the literature are also for the most part conditions for these latter phenomena The role played in the occurrence of these phenomena by suggestion, illusion, heightened imagination, collective contagion, fatigue, undernourishment, crowd excitement, loss of self-control, anxiety, emotional tension, and so forth, is well known The thin line between the occurrence of panic and the occurrence of these other forms of collective nonrational behavior is attested to by the rapid shifts from one of these forms to another in battle—from collective exaltation to panic, from panic to collective fanaticism, and the like

In a genuine sense, then, the causes offered for panic are not specific causes They are also conditions for other types of collective behavior Correspondingly, the remedies suggested for preventing panics are deficient in that they are not specific remedies for panic since they may prevent other forms of collective behavior (some of which may be desirable in situations where panic is undesirable, and vice versa)

The state of our knowledge about panic causation and control would seem to call for a more direct attack upon panic than has hitherto been accorded it. For the most part the literature dealing with panic consists of remarks—some of them exceedingly acute—made by participants or bystanders of panics Actually there would seem to have been little attempt to take a single panic, or series of panics, and study it with such care and in such detail as we are accustomed to devote to the study of other psychological phenomena, such as memory, perception, propaganda, or public opinion. This indirect attack upon the panic problem has yielded a general description of panic and its accompanying gross conditions, it has not served to set off clearly the causation of panic from that of closely related collective phenomena

A more direct approach to the investigation of panic would take a different form than simply reflecting upon panics as one has seen and heard of them It would, rather, formulate questions relating

specifically to panic in such a manner that when panics did occur a concerted effort could be made to answer these questions.[1]

Statement of the necessity for this type of approach may appear trite—but it is warranted by the fact that the published materials on mass panic do not appear to have this direct and systematic character.[2]

Assuming that the "right" questions can be asked about the phenomena of mass or group panic, there remains the problem of how one can go about answering these questions. For the very character of panic raises peculiar obstacles in the path of its investigators

For example, the use of experimental techniques for the study of human mass panic is not permissible in our society [3] Thus one major approach to psychological problems is virtually closed to the investigator of mass panics   If one chooses to study human panic by having recourse to experiments with animals, his success is likely to be limited—unless the assumption is made that the character of animal and human panic is essentially the same

A third approach, that of direct objective observation, is relatively restricted in the case of mass panic   Comparatively few psychologists ever have the opportunity of being "on the spot"   Moreover, if they do have the opportunity, the chances of their remaining outside the panic interaction as an objective observer are not likely to be great, and at any rate the conditions for accurate observation are apt to be lacking

Similarly the method of participant observation has its disadvantages for the study of panic; since the investigator cannot readily choose the place and time of the panic occurrence, and, if he does manage to be lucky enough to participate in one, he is likely to be too much involved in the group experience to be able to observe it accurately

Another approach, that of the use of personal documents, and interviews, which has played such an important role in recent

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[1] Or one could attempt to answer the questions by gathering information about panics already past   However there is probably a limited amount of materials valuable for this purpose which are available

[2] Cantril's *Invasion from Mars* is one of the few systematically planned and detailed investigations of a panic incident

[3] It has been reported, however, that the Nazis have employed them with some success in Germany

psychological research, is not altogether serviceable for the study of panic Persons who have been participants in a mass panic are likely to be rather inarticulate concerning a large part of the experience It is, after all, a characteristic feature of the panic experience that the individual loses reflective and conscious awareness of his actions.

Another approach is that of the use of published descriptions of mass panics These are certainly valuable, but they do not yield perfect data, since many of them are likely to be inaccurate and most of them are quite inadequate

The foregoing methods are certainly not to be disparaged, but it should be recognized that they are somewhat less serviceable for the study of mass panic than for the study of many other psychological phenomena Awareness of the peculiar problems raised against the investigator by the very nature of panic is the first step toward the development of better techniques and tools for its study One of the major tasks facing the student of panic is the development of methods designed to give him the kind of data he needs to answer the questions he raises about the phenomena of panic.[4]

BIBLIOGRAPHY

1 ANDREWS, L Military manpower New York Dutton, 1920
2 BROUSSEAU, A Essai sur la peur aux armees, 1914–1918 Paris Alcan, 1920 Pp 19–30 particularly
3. CANTRIL, H The invasion from Mars A study in the psychology of panic Princeton Princeton University Press, 1940
4 COSTE, C La psychologie du combat Paris Berger-Levrault, 1929 Pp 98–111
5 CYGIELSTREJCH, A La psychologie de la panique pendant la guerre Ann méd Psychol , 1916, 7 (Ser 10), 176–192
6 ELTINGE, L The psychology of war Fort Leavenworth Press of the Army Service School, 1917 Pp 47–77
7 FARAGO, L (Ed) German psychological warfare Survey and bibliography New York Committee for National Morale, 1941 Pp 59–60
8 KELLAND, C How men and women act facing terror Am Mag , 1930 (March), 109, 44–45
9 LA PIERE, R Collective behavior New York McGraw-Hill, 1938 Chap 17, pp 437–62 Also see Chap 6
10 LEMEILLOUR, DR Étude sur la panique J de Méd de Bourdeau, 1920, 91, 598–605
11 MAXWELL, W N A psychological retrospect of the Great War New York Macmillan, 1923 Pp 75–79

[4] In this regard the war situation affords an unparalleled opportunity for trained psychologists and sociologists to contribute to the understanding of mass panic as it occurs under wartime conditions Psychologists strategically placed either in the armed forces or among the civilian population would be in a position to work out for specific panics the conditions under which they developed and occurred, their character, and their effects upon personal and group organization

12 MUNSON, E   *The management of men*   New York   Holt, 1921   Pp 105–117, 242–244

13 PERCIN, A   *Le combat*   Paris   Alcan, 1914   Pp 34–85

14 PERCIN, A   *Souvenirs militaires*   Paris   Édition de "L'Armée Nouvell," 1930   Pp 173–178

15 RICKMAN, J   Panic and air-raid precautions   *Lancet,* 1938, 1, 1291–1295

16 SCHMIDEBERG, W   The treatment of panic in casualty area and clearing station   *Life & Letters Today,* 1939, 23, 162–169

17 STONE, T   Men, fear, and panic   *Infantry J ,* 1941, 39, 34–39

18 WAELDER, R   *Psychoanalytic aspects of war and peace*   (Geneva Studies)   Geneva   Geneva Research Centre, 1939   Chap 3, particularly pp 18 and 25–27

TOWARD A PROFESSIONAL CODE FOR PSYCHOLOGICAL CONSULTANTS [1]

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Every condition of life as it moves toward coherent organization, develops its own *ethos,* its own standards and codes —*John Dewey*

PSYCHOLOGISTS who enter into consulting relationships with clients—and such relationships are becoming more and more frequent—are necessarily concerned with a problem in applied ethics, whether recognized as such or not   Indeed, the satisfaction of those psychological needs for which the consulting relationship is established depends, in part, upon a clear understanding, by both client and consultant, of the ethical aspects of the relationship. The present paper seeks to make explicit the ethical basis of certain procedures found to be desirable in dealing with clients and to outline in formal fashion a professional code derived from these ethical principles for use by psychological consultants

The medical, legal, and several other professions have adopted written professional codes (6, 17), and some of them have been in operation for decades   But no criticism of psychological consultants is necessarily implied in this fact, since in every professional field a certain minimal stage of development has to be reached before the construction and adoption of a code is feasible   We believe that this minimal point has been reached.

Recent trends in the practice of consulting and counseling psychology suggest the direction in which progress in the construction of a code might most profitably be made. Such "directive" tech-

niques as making value-judgments of the client's behavior (18), the selection of goals for the client (9; 18), directing rather than cooperating with the client (8, 14), the acceptance of "transference" or emotional dependence upon the consultant (7), flattering the client (13), the corroboration or disapproval of the client's own selection of goals, decisions, or evaluations of his behavior, are being challenged by a new philosophy This philosophy rejects "directive" ("authoritarian") procedures in favor of a "nondirective" ("democratic") relationship between client and consultant. Perhaps the most complete exposition of the new technique has been given by Rogers (11), although the philosophy appears to underlie many of the practices recommended by Allen (1) for use with children, those described by Slavson (15) for use in group therapy, and undoubtedly many others

However, as far as we know, there has thus far been no explicit and systematic effort to consider the ethical aspects of the consulting or counseling relationship Rogers, for instance, discusses (11) the role of the psychologist rather thoroughly, but at no point does he deal explicitly with its ethical aspects in terms of explicit rights, duties, and objectives Nevertheless, from our point of view, his remarkable contribution to the development of counseling technique is at least as much an achievement in the application of democratic ethics as it is a gain in technique.

Judging by our own experience with it, the ethical problem in consulting or counseling relationships cannot be overestimated It is an aspect which, it would seem, is most effectively dealt with separately from, but not independently of, the technique and valuational aspects of these relationships

It is evident that modern therapeutic and analytical techniques have their roots in democratic principles And it is equally evident that most American psychologists are committed to the support of democratic principles and democratic practice throughout the entire range of human behavior But since our attempt at the construction of a professional code is presumably based on a particular, rather than an already generally approved, conception of the nature of democratic relationships, it seems desirable to define it here briefly.

By *democracy* (political or nonpolitical) we mean the continuing state of, and practice in, a voluntarily initiated and maintained relationship or pattern of relationships—involving either individuals or groups or both—in which there is an implied or explicit knowl-

edge and acceptance of the equal, but not necessarily identical, individual and mutual, status, rights, duties, objectives, and conditions, by the participants   From this it follows that a democratic *relationship* is a voluntary one in which the respective equal, but not necessarily identical, individual and mutual, status, rights, duties, objectives and relevant conditions, are mutually and explicitly, or implicitly, understood and accepted by the participants.

The definitions of democratic ethics, rights, duties, and objectives may be derived from the two preceding statements. A democratic *ethic,* for example, may be defined as a formal structure of explicitly designated, equal, but not necessarily identical, individual and mutual, status, rights, duties, objectives, and conditions, mutually accepted and used as a guide to conduct by the respective voluntary participants in a relationship   Similarly, a democratic *right* is a permissible action which, by mutual agreement, may be exercised or not as desired, by one or more of the participants in a democratic relationship, provided such action does not conflict with any of the co-related conditions, rights, duties, and status of the participants. A democratic *objective* in a relationship is one which either states or implies a desire for the optimum satisfaction of an individual or mutual need that may or may not conflict with other needs, and which does not violate any of the co-related rights, conditions, duties, objectives, and status of the persons involved in its attainment

The foregoing definitions underlie the following "rules of action," presented as a systematic code for the democratic consulting relationship.

PROPOSED PROFESSIONAL CODE FOR PSYCHOLOGICAL CONSULTANTS

The Psychologist's Duties and Rights

It is the duty of the psychologist to make a clear explanation of the nature of the democratic consulting relationship to the client before its establishment.

An explanation is necessary in view of the prevailing misunderstanding of the relationship. It seems to facilitate both the establishment and the maintenance of the relationship, as well as to serve as a criterion for conduct to which client or consultant may refer at any time. Moreover, an explanation serves to eliminate or reduce the fears, ambivalence, and even conscious hatred, that so often result from a misconception of the relationship. In practice, a com-

prehensive explanation often results in a noticeable and immediate reduction in the tension that is present in the client's attitude toward the psychologist before the explanation has been given. Sometimes, however, the client's attitude is not changed until the psychologist's subsequent conduct verifies the explanation   In any case, the gains following a definition of the relationship more than justify the time required for an explanation

Rogers (11) repeatedly refers to the "definition of the relationship" that is achieved during the course of the counseling relationship.   And insofar as he explicitly clarifies its ethical aspects in remarks to the client or counselee, he does in part what we feel is necessary at the outset.   But we also emphasize the clarification of the ethical aspects because clients are so often implicitly or explicitly concerned about the ethical aspects of their problem material

It seems probable that a full explanation will be necessary at least until such time as a professional code is accepted, widely known, and generally applied   Meanwhile, however, it would seem that those psychologists who may prefer an authoritarian approach to the consulting relationship should at least inform their clients of the existence of an alternative type of conduct for the relationship.

It is the duty of the psychologist to obtain explicit or implied approval or acceptance of the democratic consulting relationship, after he has described it to the client, and prior to its establishment

There are several reasons for this proposition: first, it makes possible a decision on the part of the client which is within the scope of his duties and rights; secondly, it more clearly establishes the mutual knowledge and acceptance of the relationship; and, thirdly, it facilitates the maintenance of a democratic relationship, since it can be referred to if and when a client goes beyond the voluntarily approved conditions of the relationship

It is the duty of the psychologist to inform the client, prior to the establishment of the relationship, that he cannot guarantee either complete or partial psychological readjustment or reorientation or any other result through cooperative analysis

This proposition is based on the psychologist's duty to facilitate the client's maintenance of self-direction, independence, and personal responsibility for the attainment of his objectives.

It is the duty of the psychologist to refuse to enter into a consulting relationship with a client or minor who cannot or will not establish a democratic relationship with him after it has been

described, and to recommend court-supervised treatment of the client's or minor's problems, if they seem to require it

A psychologist or clinical psychologist under court supervision can properly establish a compulsory relationship to an individual requiring psychiatric or clinical treatment   Such a relationship, from our point of view, is not necessarily undemocratic   But no compulsions other than those explicit or implied in the respective individual and mutual responsibilities of the participants are acceptable in a democratic consulting relationship

Some clients, to be sure, appear to want an authoritarian relationship   A desire of this sort on the part of the client cannot be met, since the psychologist, presumably, is concerned about, and responsible for, the consistency of his own democratic conduct, regardless of contrary desires of the client   Psychologists, after all, do not cooperate in the establishment of authoritarian relationships in other normal human activities, and there seems to be no reason for making an exception of the consulting relationship   As a matter of fact, a conscious or inadvertent desire for a "dependent" relationship to the psychologist can be partially explained by the client's inadequate awareness of his basic personal needs, responsibilities, and rights

It is the duty of the psychologist to avoid the development of undemocratic or authoritarian rapport

The extreme importance of rapport is generally recognized by applied psychologists.   However, while the original conception of rapport, in the usual psychoanalytical sense, has changed in recent years, there still appears to be a significant acceptance (7; 8) of the "transference" form of rapport in the psychoanalytical field   "Transference," implying as it does a certain amount of emotional dependence, can scarcely be considered democratic in the present sense   Moreover, it seems clear that we must disagree with the mental-hygiene position that "a little flattery . . . is not out of place in getting the subject into a suitable mood" (13)

Democratic rapport implies that the consulting relationship is essentially educational, pointing toward the client's personal growth, toward a raising of his level of personal maturation   Undemocratic or authoritarian rapport, or "directive" counseling, which often overlooks the educational aspects of the relationship, would seem to hinder psychological maturation or "growth" (10).   It is obvious, of course, that the client's feeling about his personal prob-

lems may make the consulting relationship more intensely emo-
tional than the usual educational relationship   Nevertheless, experi-
ence shows that a thoroughly democratic consulting atmosphere
often becomes as "comfortable" for the client as an ordinary
educational atmosphere

*It is the duty of the psychologist to maintain an overtly nonjudg-
mental attitude toward the client's experiences, values, beliefs,
problems, and evaluations*

A democratic society allows an almost inconceivable variety of
behavior, adjustment, and experiential patterns. This in turn neces-
sitates a nonjudgmental attitude toward patterns which in other
contexts might appear to be "inadequate," "unsatisfactory," or
"ineffective." If, for instance, the client's behavior has involved him
in difficulties with other individuals, the responsibility for such
consequences is obviously his own   So, too, is the responsibility for
a solution of the difficulties. The psychologist's responsibility, on
the other hand, is merely that of analytical, but nonjudgmental,
cooperation   Moreover, the psychologist must accept those devia-
tions which are satisfactory to the client, he has no right to change
them in the direction either of his own or of certain normative
patterns

Unfortunately, the nonjudgmental attitude is sometimes
interpreted as anti-moral, or as representing a position not based
on the usual moral code   This misinterpretation arises where a
clear distinction is not made between the rights and responsibilities
of the psychologist in the analytical relationship, as compared with
his rights and responsibilities in certain other relationships in which
he might be dealing with the same kinds of conduct   Suppose,
for example, that the objectives selected by a client are undemo-
cratic or authoritarian, in the judgment of the psychologist. In
such cases, the psychologist has the right to refuse to cooperate in
connection with them, and may even terminate the relationship
on these grounds, if he so desires   Thus the psychologist does not
completely escape from an overtly judgmental role, but his
judgmental rights and duties are explicitly limited in this code

The avoidance of judgmental statements also extends to the
scoring and interpretation of tests   In the democratic consulting
situation, tests are used to accumulate information which will assist
the client and the psychologist in a cooperative analysis. The judg-
mental scoring and interpretation of norms and deviations ("satis-

factory" and "unsatisfactory" in the Bell Adjustment Inventory, for example) is not in accord with a democratic consulting relationship It is often possible in practice, however, to use tests of this sort without employing their judgmental scoring

It is the duty of the psychologist to respect the religious convictions of the client

One client described her effort to achieve a better marital adjustment through Christian Science Although this had proved ineffective before, she said she might return to it if the psychological service she was getting was not successful When the consultant did not express any objection to her remarks on this point, she said, "I thought all of you psychologists were opposed to religion and especially to Christian Science But I guess you aren't. I guess you mean what you said about respecting the religious feelings of your clients "

It is the duty of the psychologist to refuse to make decisions for the client whenever the latter expresses his inability to decide for himself or wishes to avoid responsibility for a decision

Democratic conduct involves personal responsibility for the choice of conduct Therefore, it seems clear that the psychologist violates one of the client's fundamental responsibilities if he makes decisions for him One client, for example, said, "I think it would be a good idea to tell you about a sex experience I had before I got married I never told my husband about it " Her description of the experience had obvious catharsis value The question which she asked immediately afterward, however, indicated the need for a thorough understanding of the limitations of the psychologist's role. "Do you think I should tell him about this?" The answer was, "I am sorry I cannot decide that for you. As I explained to you at the beginning, you have to make your own decisions But if you wish, we can attempt to analyze your reasons for not telling him thus far, what effects this has had on your relationship, etc. . "

It is the duty of the psychologist to avoid an advisory role

"Analysis" and "advice" are significantly different forms of conduct, the latter involving a status difference between the psychologist and client Consequently, since the consulting relationship seeks to establish and maintain equal, but not necessarily identical, status between client and psychologist, advice is inappropriate in this relationship. Admittedly, non-advisory conduct is far more difficult

in connection with children's problems than at the adolescent and adult levels

It is the duty of the psychologist to employ only that terminology which is appropriate to the consulting relationship

The writer has dealt elsewhere (16) with the problem of affective term-evaluation   The negative "term-affect" involved in the word "patient" contrasts sharply, for example, with the positive "term-affect" involved in the alternative term, "client."   Since mental illness is outside the scope of this relationship, it is inappropriate to use terms, such as "patient," having medical or psychiatric connotations.

It is the duty of the psychologist to keep all of the material presented by the client strictly confidential, except when explicit permission for specific use of it is obtained

Explicit permission is necessary, for example, when the psychologist has to use certain confidential material in connection with the participation of a "third party."

It is the duty of the psychologist to employ only those techniques which do not in any way violate the democratic nature of the consulting relationship

A democratic relationship, of course, cannot by itself meet the needs of the client, but it would seem to be a restricting factor in the selection of techniques.

It is the duty of the psychologist to give the client a brief description of the technique he intends to employ

It is the duty of the psychologist to clarify the nature and limitations of every test before it is given.

Such instructions as "There are no right or wrong answers," for example, appear to be inadequate as part of a cooperative client-consultant analysis.

It is the duty of the psychologist to obtain the client's approval of the psychologist's technique after it has been described and before it is employed.

When the technique involves the taking-down of notes, for instance, it is necessary to describe their purpose to the client, and to obtain his permission to take them, before the analytical work is initiated.

It is the duty of the psychologist to inform the client that ownership and disposition of tests and test reports are in the hands of the client.

Since material presented for cooperative analysis by the client is often very personal, it seems only fair that he have the right to decide upon the disposal of tests, test reports, and similar material Experience seems to justify this proposition For instance, some clients voluntarily offer the material to the psychologist for his files before its disposition is even brought up for consideration by the psychologist Other clients express indifference or uncertainty, and still others make sure that they have all the material On two occasions, before the present proposition was put into practice, a client disposed of all test material by immediately tearing it to shreds and tossing it into the wastepaper basket

It is the duty of the psychologist to keep covert and, even if requested, to refuse an evaluation of the degree or extent or adequacy of the client's readjustment, reorientation, or the analytical service rendered during the course of the relationship or after it has been terminated.

For example, a reply to one client's question, "Do you think my adjustment is good enough now?" was, "It is your responsibility to decide what your state of adjustment is"

It is the duty of the psychologist to reject, but with full explanation, the client's description of his state of adjustment or his behavior in "mental illness" terms at any time during the course of the consulting relationship.

It is the duty of the psychologist during the course of the relationship immediately to make known to the client any of the respective individual or mutual rights or duties which may have been inadvertently left out of the preliminary explanation, and to repeat the preliminary explanation, wholly or in part, whenever necessary or desirable

Rogers (11, pp 91–92) says that "The counselor often helps to hasten the structuring of the situation, by defining it to the client in one way or another." Our position covers both the structuring of the relationship in a comprehensive manner at the outset and the relevant reinforcing structuring wherever necessary in the subsequent course of the relationship The reinforcement seems to be facilitated by the preceding comprehensive explanation.

It is the right of the psychologist, when requested or after obtaining permission, to describe alternative means that may facilitate the attainment of the client's expressed democratic objectives, provided that the means are democratic and that there is an explicit

designation of the client's responsibility for choosing the means and for any consequences that may follow from their application

Suggestions are permissible, provided they are limited to democratic means and methods, and do not involve the suggestion of objectives or decisions for the client   In practice, suggestions constitute a cooperative exploration of relevant means   For instance, instead of saying, "I suggest that you . . ." the psychologist may say, "I can't suggest that you do this or that   However, if it's all right with you, we can go over the different things that you might do.   But you will have to choose what particular thing you want to do, and be responsible for it "

An implied value or affirmation of "good" is involved in each of the means cooperatively explored by the psychologist and the client for possible use in connection with those expressed objectives of the client which the psychologist accepts.   For example, a thorough discussion of a problem situation by the participants is a possible means, and of course implies a value judgment.   Whatever the value of this particular means may be, however, it is subordinate to the rights and responsibilities of the client in connection with the choice and application of means   The psychologist, consequently, cannot and must not insist on the use of any particular democratic means from among those available to the client

It is the right of the psychologist to request permission to enlarge the scope of a problem when necessary

Obviously a psychologist cannot compel a client to present problem material which he prefers to retain   But it seems reasonable to request permission to extend the scope of the problem material, when such is indicated, for it is clear that further analysis might otherwise be ineffective or impossible.

It is the right of the psychologist when requested or when permission is obtained to contribute a nonjudgmental description of the various local, regional, and national norms that are relevant to his client's problems, even though the norms may conflict with each other and may be inaccurately described.

The psychologist's avoidance of an evaluation of the described norms makes it possible for him to contribute material which, presumably, extends the informational basis and thereby facilitates a more effective cooperative analysis of the client's problems.

It is the right of the psychologist to request the client's permission to retain test, test results, or other materials for his files or for research purposes, subject to reasonable precautions

Psychologist's "Third Party" Duties and Rights

It is the duty of the psychologist to request a description of the objectives of his client in relation to other parties connected with his psychological problems in order that the psychologist may avoid any violation of their rights

On several occasions the writer has found that a discussion of his conception of the democratic rights of persons other than the client involved in the problem pattern, plus a clear-cut stand in regard to the client's specific objectives and the methods for attaining them, has laid the basis for a solution of the problem without the necessity for further analytical service This outcome implies that the psychologist, as a part of his training, must become expert on the nature of democratic relationships in general, and corroborates English's recommendation (3) concerning the need for ethical training in curricula for applied psychologists

Comprehensive understanding of the ethical aspects of human relationships seems to require also a knowledge of the underlying valuational aspects, at least insofar as a simple differentiation in democratic and authoritarian terms is concerned Marital relationships, parent-adolescent relationships, and many others often dealt with in psychological consultation, rest upon values, beliefs, and affirmations of intrinsic "good." Consequently, the training of applied psychologists might well include not only the study of ethics, but also study of the valuational or affirmational aspects of human relationships

It is the duty of the psychologist to request the permission of the client before seeking the participation of any person who may contribute to the analytical process

It is the duty of the psychologist to describe the democratic nature of his relationship to a third party, and to obtain approval of it, prior to the latter's participation, whether or not his participation is requested by either the client or the psychologist.

It is the right of the psychologist to repeat the actual analytical statements he has made, if he has been misquoted by the client,

*and to describe the context, whenever a possible misuse of them is
brought to his attention by an injured third party.*

It is not a rare experience to have a client use an analytical state-
ment in a modified or distorted form as an aggressive measure
against some person involved in his problem situation. For such
cases it is necessary that the psychologist have the right to protect
himself despite any embarrassment to the client that may result

Client's Duties and Rights

*It is the duty of the client to maintain democratic self-direction
throughout the course of the relationship*

It is difficult to overestimate the importance of the desire for self-
direction, self-respect, and independence in our culture   These are
desires which, in large part, are the result of a multiplicity of condi-
tioning factors in our essentially democratic environment   In fact,
the conditioning is so intensive that the decision to consult someone
professionally about a psychological problem is sometimes a trau-
matic experience in itself, because of the prevailing interpretation of
the resultant relationship

The client's self-direction involves decisions as to which aspect
of a problem pattern shall be covered first; the acceptance or rejec-
tion of analytical statements, decisions in regard to the participation
of others, etc.

Analysis in a democratic consulting relationship is a cooperative
process   It is based on the assumption that the client, as well as
the psychologist, is capable of making an analytical contribution
to the problem under consideration.   Moreover, "cooperative
analysis" implies equal, but not necessarily identical, personal status,
and seems to help prevent directive analysis on the part of the psy-
chologist and inadequate analytical participation on the part of the
client   His analytical rights, and his usual analytical contribution,
make the client a "co-analyst," so to speak   In practice, cooperative
analysis is represented and furthered by phrases such as, "Can we
say that   ?" "We have already seen that. . ."

"Cooperative analysis" seems more effectively to represent the
democratic relationship than the term "nondirective counseling"
which has been employed by others (12; 11).

It is the duty of the client to select his own goals or objectives

The psychologist violates a democratic duty of the client when
he selects goals or objectives for him.   The implication in such

conduct is that the psychologist knows what specific objectives are "good" or "bad," desirable or undesirable, satisfactory or unsatisfactory, for everyone This is obviously an unacceptable assumption on which to base cooperative analysis Moreover, goal-selection by the psychologist is undemocratic even when it is inadvertent

This position may be illustrated by citing the case of one client who asked, "I'd like to know what kind of work you think I am best suited for." The reply, in part, was, "I can't choose a vocational goal for you, but if you wish I can try to help you learn more about yourself so that you may be able to develop a better basis for your own decision "

While the so-called "positive mental-hygiene goals" (9; 13) are acceptable in general, it is neither proper nor very effective to urge them on the client To do so implies a moralistic judgment of the client's state of adjustment and personality Moreover, such a procedure does not adequately take into account the client's readiness for change, without which the suggested personality and adjustment goals are more or less meaningless to the client

On the other hand, however, when the client expresses a desire to bring about personality or character changes, it is permissible to describe to him in an exploratory and informational manner the whole range of personality and character goals from which he can choose those which seem to have meaning and significance to him Through this procedure, the psychologist apparently facilitates the maintenance and improvement of democratic self-direction on the part of his client, and himself avoids an unjustifiable and ineffective moralizing role

The avoidance of a goal-selecting role is relative rather than absolute, however, since there is a sort of selection in the psychologist's assumption that the goals chosen by the client not only will be democratic, but must be so if he expects analytical cooperation from the psychologist There is, however, a vital difference between the relatively independent selection of *specific* goals by the client, on his own responsibility, and the selection of *specific* goals for him by the psychologist

It is the duty of the client to decide when he has achieved a state of adequate psychological readjustment, reorientation, or analytical service.

In first seeking a consulting relationship, an individual is exercising his ability and right to evaluate his own state of readjustment

In assuming responsibility for evaluating his state of adjustment as adequate or satisfactory, the client is exercising the same ability and right.

It is the duty of the client to be responsible for whatever use he may make of the analytical statements made by the psychologist during the course of the relationship

It is the right of the client to terminate the relationship at any time, for any reason.

It is the right of the client to reject or disregard any analytical statement that the psychologist may make regarding the client's problems or objectives or means

All of the analytical statements made by the psychologist are tentative rather than final formulations, and of course have no compulsory aspects It should be noted, however, that we are differentiating here between the psychologist's analytical statements and his strictly defined judgmental responsibilities and rights

It is the right of the client to evaluate and reevaluate, independently, his own behavior, conduct, adjustment, status, role, goals, and experiences throughout the course of the consulting relationship

It is the right of the client to withhold any part of a problem, without regard to the possible adverse effects on the adequacy of analysis

The consulting relationship is not a compulsory one, hence the client need not present any problem material he may wish to retain However, it has been our experience that, the more democratic the relationship, explicitly as well as implicitly, the more readily does the client present material which might otherwise be withheld

Duties in Relation to Minors

It is the duty of the psychologist to give the parents or parent surrogate and the minor a reasonably complete description of his conception of the respective individual and mutual democratic rights and duties of their relationship, taking into account the relevant legal, physical, and psychological limitations.

Many problems involving minors appear to develop because of an inadequate knowledge of the individual and mutual rights and duties involved in the parent-child or parent-adolescent relationship. Hence, an explanation of the psychologist's conception of these rights and duties may often lay the basis for the solution of

the particular problem, and tends to prevent the development of others

It is the duty of the psychologist to determine whether or not the objectives of the parents or parent surrogate are democratic in relation to a minor and to refuse to enter into a consulting relationship if they are not

It is the duty of the psychologist to serve as an intermediary between the parents or parent surrogate and a minor when requested for the purpose of transmitting information, evaluations or for other proper purposes

The following example may serve to illustrate both the foregoing principles One client wanted her seventeen-year-old son to go to a certain university in this area for reasons of social prestige, but the son preferred an eastern university The client asked for help in convincing him that he should not go east The parent's objectives in this case were considered unacceptable On the other hand, however, the role of intermediary for the purpose of working out a democratic compromise was acceptable to both parent and son, and a succcessful one was arranged

It is the duty of the psychologist to refuse to cooperate in the employment of undemocratic or authoritarian means by the parents in relation to a minor, even if the expressed parental objectives are democratic

It is the duty of the psychologist to explain to a minor the nature of the democratic relationship to be established between him and the psychologist

It is the duty of the psychologist to determine the objectives of the minor in relation to his parents or parent surrogate

It is the duty of the psychologist, in relation to a minor, to use only those techniques which aim to establish, maintain, or enhance a democratic relationship between the minor and his parents or parent surrogate

It is the duty of the psychologist to refuse to establish a consulting relationship with a minor without the explicit consent of the latter's parents or parent surrogate.

Mutual Duties and Rights

It is the duty of both the psychologist and client to inform each other about any undemocratic conduct on the part of either or both that may occur at any time during the course of the relationship.

*It is the duty of both the psychologist and client to conduct them-
selves at all times in a manner that will fully comply with the legal
aspects of the consulting relationship.*

Legal aspects are involved, explicitly or implicitly, in all human
relationships, varying, of course, from culture to culture or from
time to time in a given culture It is necessary, therefore, to meet
explicitly the objection (encountered in several discussions) that the
"nonjudgmental" attitude permits the description of the past, or
intended, anti-social or criminal behavior by the client, without
implying the psychologist's readiness to exercise his duty as a citizen
in connection with such behavior This is a legitimate criticism,
and therefore it must be accounted for in the formulation of a sys-
tematic code of ethics, even though the possibility of occurrence is
remote

*It is the right of both the psychologist and client to refuse to
answer questions that are not directly concerned with the relation-
ship itself or the consultation process*

*It is the right of both the psychologist and client (or minor, if
he obtains permission from his parents or parent surrogate) to
establish, by mutual agreement, any supplementary or substitutive
individual or mutual democratic rights, duties, and objectives not
explicitly stated in the present code*

Since the present formulation is not to be considered final, the
purpose of this proposition is to facilitate the improvement of this
code by those who may be concerned with it.

Interprofessional Duties and Rights

*It is the duty of the psychologist to recommend, at the outset,
that the client consult a physician*

This proposition has been found necessary in order more clearly
to delimit the psychologist's responsibilities. Compliance with this
recommendation is, of course, not compulsory

*It is the duty of the client to be responsible for any consequences
that may follow from noncompliance with the medical consultation
recommended at the outset of the relationship*

*It is the right of the psychologist to discuss the possible problem-
relevant medical factors with the client's physician if he obtains
permission from the client*

*It is the duty of the psychologist to reject a client's unreasonable,
general or specific, criticism of psychiatrists, psychologists, and*

others engaged in the Consulting Psychology field or their tech-niques, but such rejection must be accompanied by an effort to clarify the client's understanding.

Other interprofessional ethical propositions will undoubtedly be formulated as the various interprofessional relationships become clarified.

CLARIFICATION

Valuational Aspect [2]

It can be shown (2; 4; 17) that valuational phenomena are basic to all human conduct. And it is becoming increasingly clear (2, 6) that they are properly an object for scientific investigation. Hartmann (5), for instance, points out that "   . all science, all logic and every act of intelligence exhibits the valuing-process in some form   . " but that "Psychologists and other social scientists have too often acted as though neither they nor other men had any summun bonum or even a series of minor bona that meant anything to them." Consequently, psychology has had "the least to offer in fields that concern men most."

The specific affirmations of the values, intrinsic "good" or "goods," and beliefs that underlie one's relationships are, however, primarily an expression of personally approved valuations or affirmations   And the resultant personal ethical codes made necessary by the problem of effective personal conduct in various relationships are likewise personal expressions, or personal solutions, so to speak.

Nevertheless, these codes are more than a personal matter, since the welfare of others is also involved   And this is true for the whole range of personal behavior, including the occupational area which is our concern here. Therefore, while the present professional code is an expression of personal position in regard to professional values and standards of conduct, it can be dealt with as a basis for the discussion of the ethical problem in Consulting Psychology—a point of departure, in other words

In this connection, moreover, it would seem that the recognition and acceptance of the basic democratic needs, values, beliefs, and "good" that underlie the various forms of the consulting relation-

[2] We hope to elaborate our position on the valuational aspect of the consulting relationship in a later paper

ship are a necessary minimum, at least for the psychologists concerned, if the maximum "good" for all involved is the primary objective of the consulting relationship. However, we cannot here undertake explicitly and systematically to formulate all the valuations that underlie the democratic consulting relationship But we can indicate, by means of an example, how this might be done

Maximal democratic self-direction, for instance, when formulated as an ethical proposition, is either a right or duty, but the value or belief or "good" on which it is based, is implied rather than explicit. This implied valuational aspect can be explicitly formulated as follows. "The maximum possible democratic self-direction is a basic need, good or value in the consulting relationship" Thus stated, it can be seen that certain objectives [3] necessarily follow, namely, that the attainment and maintenance of democratic self-direction are desirable, and that the re-establishment of democratic self-direction is likewise desirable, if it has been lost

Unclarified Personal Orientation

One of the writer's experiences indicates, especially, the urgent need for a professional code of ethics in the Consulting Psychology field Several years ago, in a conversation, a colleague who was engaged in part-time work as an applied psychologist, expressed himself in a way that seems to typify the authoritarian position. Among other things he said, "The client has no rights When he comes to me I have complete charge." "Yes, if you put it that way, I am a sort of Jehovah during the course of the relationship " "I am a scientist When I analyze a problem for a client, I do it objectively I am a monist—I can't accept the dualistic idea of self-direction in my clients " "For instance, when ———— came to me about his problem I deliberately slanted my analysis in the way I thought would be best for him "

These remarks clearly indicated a misunderstanding of the ethical aspects of the consulting relationship, and an unclarified personal orientation

Undemocratic or authoritarian conduct on the part of the psychologist is, of course, almost invariably inadvertent Nevertheless, it seems desirable for applied psychologists to give some attention

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[3] The relation of personal objectives to basic democratic personal and societal needs has had to be dealt with directly in the development of Psycho-Script, the analytical technique which the writer has been employing for several years

to the clarification of their personal orientations For it is apparent that the "inadvertent" undemocratic conduct can be due not only to an inadequate knowledge of the ethical aspects of the usual consulting relationship, but also to possible "unconscious" authoritarian or undemocratic tendencies in their personal orientations There is, therefore, a need for techniques which will facilitate the clarification and acceptance of the psychologist's personal orientation, prior to his entrance into the field

This, to a considerable degree, is achieved by the personal psychoanalysis which is required for accredited standing in the related field of psychoanalysis But, since many psychologists are not completely satisfied with this procedure, the development of other techniques for this purpose is indicated A discussion of this question is, however, outside the scope of this report

Intra- and Interprofessional Aspects

There are a number of aspects of the ethical problem which are as yet unclarified, but which must be dealt with sooner or later. What, for example, shall be our position in regard to advertising psychological services? What sanctions shall we adopt in connection with the enforcement of a code? What shall we do with respect to the correction of the prevailing public misunderstanding of the consulting relationship? Should representative members of the lay public be asked to contribute to the formulation of our code? These are questions which the writer obviously cannot deal with independently Furthermore, the clarification of the relations of the various fields of applied psychology to each other, and to contiguous professions, is clearly dependent on the cooperative effort of the organizations in these fields

Style

An examination of a number of codes of ethics (6) indicates that the style of the present one differs from most, with the partial exception of the Legal Code of Ethics (1908) The chief difference is that our code is formulated in terms of explicit rights, duties, and objectives, whereas the others with which it has been compared are formulated in various more or less equivalent terms Some of them, for example, are formulated in terms of "should," "proper and improper," "ethical" and "unethical," and "professional" and

"unprofessional." But it seems possible to classify all of them into either a complete "is" or "ought to" or "mixed" style.

The "is" and "ought to" differentiation is without much significance, apparently, judging by the clarifying discussion of it by Felix Cohen in his *Ethical Systems and Legal Ideals* (2). However, the "is" formulation appears to have certain advantages in that it sounds less "moralistic" than the "ought to" alternative formulation and seems to result in a more exact and matter-of-fact statement of the ethical propositions.

Written Copies

The understanding of the consulting relationship might be greatly facilitated in the future by the presentation of written copies of an officially adopted professional code to prospective clients, prior to the establishment of the relationship A development of this sort would probably make it unnecessary to explain the relationship, except at those points during its course where a partial reinforcing clarification is necessary or desirable. However, it would not eliminate the need of an explicit or implied approval of the relationship by the client at the outset

RESULTS

The practical effects of consistently democratic conduct in the consulting relationship seem to be. (*a*) the development of a higher degree of analytical objectivity; (*b*) the prevention of undesirable value-judgments, (*c*) the maintenance of self-direction and self-esteem on the part of the client; and (*d*) the improvement of the client's understanding of the nature of the relationship In short, the outcome is the establishment of a relationship that is "psychologically comfortable" for the participants

Moreover, the actual experience of a democratic relationship is usually so satisfying that former clients, as one might expect, appear to find it much easier to return for analytical help on other personal problems, or for supplementary help on those already dealt with, if and when such needs develop

Likewise, if the author's experience is a criterion, democratic consulting relationships have a "good-will" value. For, time and again, he has found that former clients have referred others to him on the grounds that the prospective clients may not only expect a democratic relationship, but must accept it as a prerequisite of analytical assistance The nature of these references is indicated in

remarks such as, "He said that you don't give advice, and that you don't decide anything for a person " "She said that you just help a person analyze his problem instead of telling him what to do "

The present code is obviously an attempt at an ideal formulation. And, as in the case of other ideals, it may be argued that complete attainment is, in all probability, beyond the reach of any consulting psychologist But this argument is beside the point, for we are fully aware of the gap between this ideal formulation and our own practice, and yet we are also aware of the great improvement in our conduct in the consulting relationship which has come from direct consideration of the ethical problem. Moreover, it seems relevant to point out that not only has our own conduct been thus improved, but also that of our clients who have necessarily had to give direct attention to the ethical aspects of the relationship established between us This latter outcome is not without importance, it would seem, in regard to its contribution to the psychological growth (10) or maturation of the client In our terms, it results in a gain in the client's awareness of the general meaning of democratic independence, rights, responsibilities, and values in human relationships

VALIDATION

The propositions which constitute our code have been developed piece-meal by the writer over a period of five years. They have been subjected, as far as possible, to the only kind of validation that seemed to be feasible within the limits of his own situation, i e., general agreement among clients, colleagues, and other interested persons, on the nature of appropriate conduct in the relationship. The present validation, however, is clearly unsatisfactory and indicates the need for a more rigorous investigation of this problem in applied democratic ethics. Our position here, therefore, is presented as merely suggestive or tentative rather than conclusive, and, in line with this, we have included a proposition in the "mutual rights and duties" section which should facilitate the improvement of the code.

RECOMMENDATIONS

1 That the further development and validation of our proposed professional code for the consulting relationship be considered by the Committee on Scientific and Professional Ethics of the APA

2. That psychologists make a comprehensive explanation of the democratic consulting relationship to their clients or minors before establishing it

3 That more attention be given to the ethical, valuational, and relationship training of all students preparing to enter a field of applied psychology

4 That psychologists accept the responsibility for publicizing the nature of the democratic consulting relationship

5 That procedures be developed for the achievement of minimal standards of personal orientation by those preparing to enter a field of applied psychology

6 That psychoanalysts, psychiatrists, etc, clarify and formalize the special ethical characteristics of the various forms of democratic relationships in their own fields.

7 That no technique be employed without a thorough consideration of its ethical aspects

REFERENCES

1 ALLEN, F *Psychotherapy with children* New York· Norton, 1942
2 COHEN, F *Ethical systems and legal ideals* New York Harcourt, Brace, 1933
3 ENGLISH, H B Fundamentals and fundamentalism in the training of applied psychologists *J consult Psychol*, 1941, 5, 1–13
4 FEIBLEMAN, J A theory of social belief *J Psychol*, 1943, 16, 219–239
5 HARTMANN, G W Value as the unifying concept of the social sciences *J soc Psychol*, 1939, 10, 563–575
6 HEERMANCE, E L *Codes of Ethics* Burlington, Vt Free Press Printing Co, 1924
7 HORNEY, K *New ways in psychoanalysis* New York Norton, 1939
8 KARDINER, A *The individual and his society* New York Columbia University Press, 1939
9 McKINNEY, F *The psychology of personal adjustment* New York Wiley, 1941
10 ROGERS, C R *Some newer concepts of psychotherapy* Columbus Ohio State University, 1940
11 ROGERS, C R *Counseling and psychotherapy* New York Houghton Mifflin, 1942
12 SARGENT, H Nondirective counseling applied to a single interview *J consult Psychol*, 1943, 7, 183–190
13 SHAFFER, L F *The psychology of adjustment* New York Houghton Mifflin, 1936
14 SHELDON, W H *Psychology and the Promethean will* New York Harper, 1936
15 SLAVSON, S R *An introduction to group therapy* New York The Commonwealth Fund, 1943
16 SUTICH, A Proposed improvement in terminology relating to personal psychological problems *Psychol Rec*, 1941, 4, 375–387
17 TAEUSCH, C F *Professional and business ethics* New York Holt, 1926
18 THORPE, L P *Personality and life* New York Longmans, Green, 1941

SHORT ARTICLES AND NOTES

ATTITUDES TOWARD CRIPPLES [1]

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THE social-psychological situation of the crippled person is frequently quite different from that of his noncrippled contemporaries   The cripple, therefore, frequently offers an excellent opportunity for studying the influence of long-continued social conditions upon behavior   The increasing demand for psychological counseling in rehabilitation work with war and civilian disabled makes the exploration of the social-psychological problems of cripples an urgent practical task as well as an opportunity for scientific discovery

In defining the psychological situation of cripples, the attitudes of noncrippled persons toward them are among the more important factors to be considered, for cripples have a subordinate, minority status and must accommodate themselves to the expectations of the noncrippled dominant majority   The object of the present investigation is to describe the attitudes which noncrippled college students express toward crippled persons   By the use of rating scales we have attempted (1) to determine the beliefs held as to cripples' behavior characteristics, (2) to measure the degree of favorableness of attitude toward cripples both in general and with respect to particular behavior characteristics, and (3) to find possible correlates of attitude toward cripples

A series of rating scales was prepared for rating the following 24 personality characteristics   disposition (good humor), self-pity, friendliness, self-confidence, self-reliance, social poise and tact, unselfishness, social adaptability, aggressiveness, trustworthiness, sensitiveness, kindness, tolerance, persistence, courage, mental alertness, vitality, originality, impulsiveness, submissiveness, emotional restraint, conscientiousness, realism, and religiousness

Directions were as follows

Although there are individual differences among cripples, in many of their personality characteristics they tend to differ from people who are not handicapped.   We are anxious to determine in what ways these differences are evident

Check the point on each scale which in your opinion best describes physically handicapped (crippled) people with respect to each of the qualities listed below   Make your answers refer to persons with serious physical disabilities but who are not bedridden or confined to their homes   For example, make your answers refer to persons who must wear braces, artificial limbs, etc , to persons who limp seriously, who have missing, paralyzed or malformed arms or hands, to dwarfs, to persons with defects which are obvious to a stranger, but who are otherwise in good health   Do *not* make your responses refer to the blind, the deaf, or to persons with speech or heart defects

You may check any point on a scale   For example this item

Disposition

	✓				
Light-hearted, constant bubbling gaiety	Generally good humored, smiles easily, full of fun	Average, for the most part moderately cheerful	Tendency to be somber, serious, less cheerful than average	Usually seems depressed, despondent Seldom smiles or laughs

You would check "light-hearted, constant bubbling gaiety" if you think that phrase best described crippled people in general   Or if you believe that cripples as a whole are "generally good humored, smile easily, and are full of fun," check that point   Or if you feel that they fall between these two descriptions, check a point between them, as in the illustration above

Each scale line was 8 inches long   The descriptive phrases were placed at the ends and at 2-inch intervals under the scale line   The rating scales were placed in the series in random order, with "good" and "bad" extremes at the right or left ends according to chance

Each rater was asked to rate not only crippled persons but also the ideal person   The directions on the first sheet of the scale asked only for ratings of cripples, it was only after he had rated cripples on all 24 traits that the rater received these additional directions (printed after Item 24, religiousness)

Turn back to Item 1 (Disposition) and indicate with a capital I (eye) the point at which a person who is *Ideal* in this trait would fall   Then *do the same* for each of the other 23 items

For scoring purposes, each of the scales was divided into 22 equal units   This division yielded ratings in terms of small yet manageable units, it gave exactly 11 units, i e , possible ratings, on either side of the average point (the center of the line), and it made each of the other description points the center of a unit (namely, the first, sixth, seventeenth, and twenty-second units)

Degree-of-favorableness-toward-cripples scores were derived from these ratings by subtracting each person's ideal rating from his cripple rating on each scale   This difference was interpreted as an indication of favorableness of attitude on the assumption that a person who regarded cripples more favorably on a particular characteristic would place his cripple rating closer to his ideal rating than a person not so favorably disposed toward cripples   Degree-of-favorableness scores were computed for each person for the specific scales   In addition, a generalized attitude score was obtained by summing each person's difference scores on all the scales

The series of rating scales was administered to 117 students of elementary psychology at Stanford University, 84 women and 33 men   The findings reported here are based on the data for these 117 people

RESULTS

Median Ratings   The profiles of the median cripple and ideal ratings are shown in the figure   For clarity of exposition the favorable end of each scale has been placed at the left, and the scales have been placed in order from the most extreme cripple rating in the favorable direction to the most extreme cripple rating in the unfavorable direction

The descriptive phrases falling nearest to the points of the median cripple ratings are as follows

Conscientiousness   Tries harder than most
Self-reliance   Tendency to have more than average degree of self-reliance
Kindness   More kind than average
Emotional restraint   Tendency to be reserved, seldom lets the world know his feelings
Persistence   Quite persistent, gives up only after definite proof of impossibility
Mental alertness   Intelligent, more alert than average.
Originality   Tends to be more creative than average
Religiousness.   Tendency to be more religious than most people.
Impulsiveness   Inclined to ponder possible results of behavior

Unselfishness   Marked tendency to be unselfish, generous, altruistic
Friendliness   Average degree of friendliness
Trustworthiness   Average degree of trustworthiness
Disposition   Average, for the most part moderately cheerful
Tolerance   Average degree of tolerance
Courage   Average amount of courage.
Self-pity   Average amount of self-pity
Social poise and tact   Average ability and interest in getting along with others
Vitality   Average amount of vitality, energy, pep
Self-confidence   Average amount of self-confidence
Submissiveness   Average amount of ascendance and submission
Realism   Given to reverie occasionally
Aggressiveness   Tendency to be mild, gentle in approach to people
Social adaptability   Finds it somewhat difficult to adjust to new situations
Sensitiveness   More sensitive than average
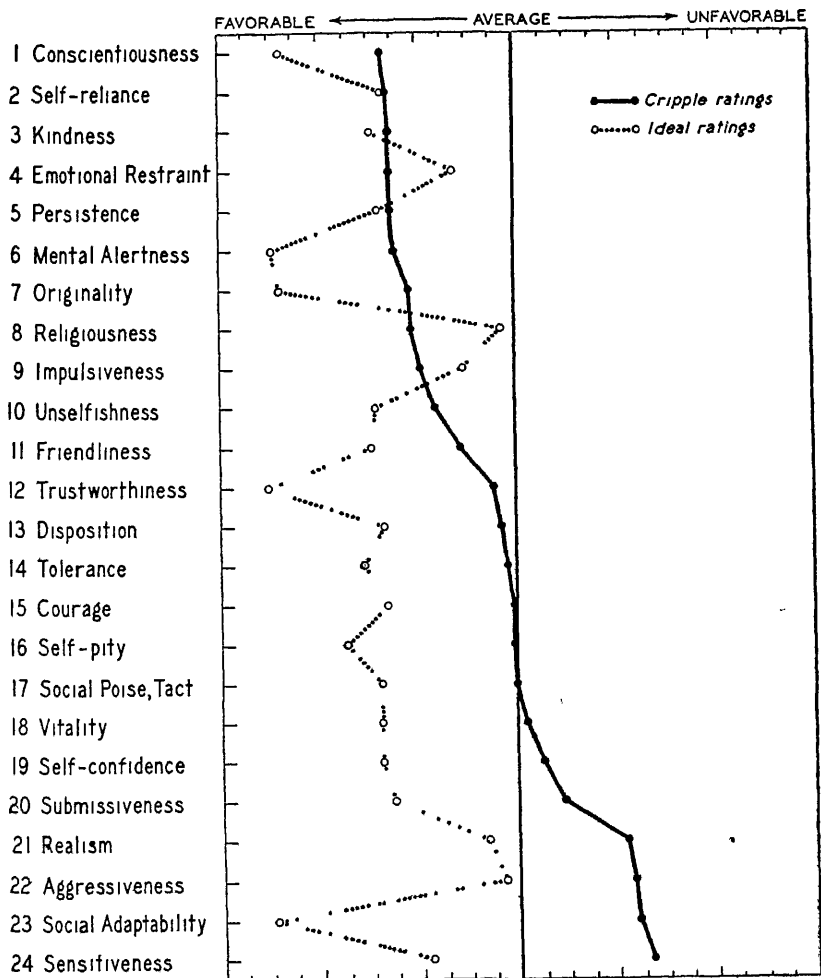
FIG I   MEDIAN CRIPPLE AND IDEAL RATINGS

According to these data our subjects believe that cripples differ from "average" in the same direction as ideal persons upon ten characteristics, that they are near the average on ten characteristics, and that they differ from average in an unfavorable direction (away from the ideal) on four characteristics

Favorableness of Attitude on Specific Items   The means of the differences between the ideal and cripple ratings are significantly greater than zero for all items   Even on those items where the mean difference between cripple and ideal ratings is smallest it is significant, *i e*, upon none of the items are cripples given ideal ratings

The most favorable attitudes toward cripples are with respect to religiousness, self-reliance, kindness, conscientiousness, emotional restraint, and unselfishness In these cases the mean difference between ideal and cripple ratings is less than 5 10 units, *i e*, less than one-quarter of the total scale length

The least favorable attitudes are with respect to social adaptability, sensitiveness, self-confidence, and self-pity   In these cases the mean differences between ideal and cripple ratings are greater than 7 53 units, *i e*, greater than one-third the total scale length

General Favorableness of Attitude   The generality or consistency of the difference scores throughout all the items was tested by correlating the total difference scores on the first half of the test with total difference scores on the second half of the test   The result was a correlation of $+$ 62$\pm$ 04, which indicates a degree of consistency higher than would be expected if chance alone were operating

This same correlation coefficient ($+$ 62) can be regarded as a reliability coefficient in the same way that a split-half correlation coefficient is so regarded Applying the Spearman-Brown prophecy formula this reliability coefficient is raised to *83*

By summing each individual's difference scores upon all scales a general favorableness-of-attitude score is obtained   The distribution of these scores is symmetrical, the mean of the distribution is 135 9, and the standard deviation 42 57   The range of scores is 29 to 326   This means that the subject most favorably disposed toward cripples rated them, on the average, within 1 2 units of his ideal on each scale, the subject most unfavorable toward cripples rated them, on the average, 13 6 units from his ideal, the "average" subject rated cripples 5 7 units from his ideal

The general attitude score is unrelated to the sex or religious affiliation of the subjects

Variability of Ratings   The degree of agreement among the raters as to the characteristics of crippled and ideal persons was measured in terms of the difference between the 25th and 75th percentile ratings of the group on each scale The smaller this difference, the greater the degree of agreement upon the rating There is greater agreement upon the ideal ratings in 20 cases, on only four scales are the Q_3–Q_1 differences smaller for the cripple ratings than for the ideal ratings, namely on sensitiveness, courage, impulsiveness, and realism

The amount of variability in the ratings differs considerably from trait to trait For the cripple ratings, Q_3–Q_1 varies from 3 63 scale units to 10 45 scale units There is greatest agreement with respect to sensitiveness, vitality, courage, religiousness, kindness, and persistence   For these, Q_3–Q_1 is less than 5 22 in every case There is least agreement on the ratings of self-pity, self-confidence, tolerance, submissiveness, disposition, and conscientiousness, Q_3–Q_1 is 7 00 or greater in each case   For ideal ratings Q_3–Q_1 varies from 1 34 to 5 68 scale units, there is greatest agreement upon self-reliance, persistence, disposition, social poise and tact, self-

confidence, and mental alertness, for these Q_3-Q_1 is less than 2 42 in every case There is least agreement on ideal ratings of realism, aggressiveness, impulsiveness, sensitiveness, courage, and emotional restraint, Q_3-Q_1 is greater than 5 23 in every case

SUMMARY

A series of rating scales was used in this study (1) to describe beliefs about the behavior characteristics of crippled persons, (2) to define the standard in terms of which this behavior is judged (ideal behavior), (3) to measure favorableness of attitude toward crippled persons with respect to particular behavior characteristics, and (4) to measure general favorableness of attitude toward crippled persons on all the characteristics rated

According to the data gathered, a highly educated group of subjects believe that crippled persons tend to have behavior characteristics that differentiate them from noncrippled persons in both favorable and unfavorable ways   Individual raters exhibit a generalized attitude or bias toward cripples which is manifested throughout ratings of a wide variety of behavioral characteristics, this general attitude varies from extremely favorable in some subjects to very unfavorable in others   With the data at hand we were unable to identify any correlates of this general attitude   The degree of agreement as to the characteristics of cripples varies greatly with the behavior being rated, there is greater agreement on the behavior characteristics of ideal persons than of crippled persons   The data give no support to the frequently stated opinion that cripples are, in general, regarded unfavorably   Our subjects rated cripples more frequently toward the favorable than toward the unfavorable ends of the scales   However, this finding must be interpreted in the light of the fact that we have dealt only with verbal expressions of attitude in a restricted cultural milieu.

STREPHOSYMBOLIA AND READING DISABILITY

BY C O WEBER

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IN 1926 Orton (3) offered the concept of *strephosymbolia* ("twisted symbols") as an explanation for certain forms of reading disability Orton is sometimes supposed to champion the view that this defect is present in all forms of reading disability On the contrary, he recognizes other causes, such as defects of vision and hearing, general intellectual defect, and emotional disturbances (3, pp 72–78) Reading disability may occur in the absence of such other causes Orton was led to infer the role played by strephosymbolia because of the presence of unique symptoms in some cases which validate this concept Orton does not stress strephosymbolia as a frequent cause of reading disability Indeed, in the communities visited by his unique mobile clinic only some 2 per cent of the total school population exhibited this condition In some communities the precentage of strephosymbolics is more than doubled due to inefficient educational methods (4, p 141)

Neurologically, Orton's theory implies two major principles of cortical organization (1) the principle of unilateral cerebral dominance of some linguistic functions, and (2) the principle of isotropism The latter principle holds that "engrammes" of corresponding right and left functional areas of the cortex are oppositely oriented A thorough examination of these assumptions would require separate treatment The object of the present paper is rather to examine Orton's claims from the practical point of view To what extent do inefficient readers manifest the symptoms implied by strephosymbolia?

According to Orton (3, pp 80–85) there are three main symptoms, as follows

1 Reversals and confusions are of central importance Static reversals comprise the reversals of letters which show right-left symmetry (p and q, b and d) Similar letters are confused (m and n) Kinetic reversals consist of reversed words (was and saw, etc)

2 A second symptom is the facility with which the affected subject can read reversed ("mirrored") script

3 The spelling of strephosymbolics is notoriously bad

EXPERIMENTAL TESTS OF ORTON'S THEORY

Reversal errors in reading have been given thorough attention by experimentalists The findings, so far, give very dubious support to the theory of strephosymbolia It would require a separate monograph to review all of the studies in detail Suffice it to say that the findings justify the following conclusions

1 There is no reason for supposing that readers fall into two classes, those who make excessive reversal errors, and others who are entirely or nearly free from such errors One might suppose that Orton's theory implies "types", but since he supposes that there are developmental forms of such defects there are naturally many degrees of them

2 The tendency to confuse and reverse symbols is typical of very young children With increasing maturity this tendency is replaced by normal left-right progression Only an unusual persistence of reversal tendencies could be regarded as a basic cause of reading disability

3 Reversal errors are found to comprise but a small part of all errors made in reading (1, 2, 5)   The crucial matter for Orton's theory is not the total number of all errors, or even the total number of reversal errors   If Orton is right, the subject affected should rather show an excess *ratio* of reversal to nonreversal errors Many published studies ignore this consideration

The study made by L S Wolfe (7) deserves special attention because of the rigorous care with which it was carried out, and in particular for the careful reporting of various categories of error   Two groups of boys were selected after thorough testing in order to equate them for all factors except reading ability, regarding which the 18 experimental cases showed a retardation of reading age of about two years below chronological age   The chronological ages ranged from 8 years and 11 months to 9 years and 11 months   These two groups were compared as regards reversal tendencies in six reading situations, of which the first is of most significance for the present discussion   The first experiment consisted in the tachistoscopic presentation of 100 words to each subject in three different ways First, the words were exposed as wholes, secondly, with the letters appearing in left-to-right succession, thirdly, in succession from right to left   Wolfe found that the inefficient readers (experimentals) make more errors of all kinds in all three methods of presentation   The present writer computed the ratios of reversal errors (complete and partial reversals) to nonreversal errors from Wolfe's data   It turns out that the normal readers (controls) make relatively more reversal errors except for the third (right-to-left) method of presentation   The ratios secured by dividing reversal errors by all other errors (omissions, additions, substitutions) for each of the three methods of exposure are given in Table 1

TABLE 1

RATIOS OF REVERSAL TO NONREVERSAL ERRORS

METHOD OF EXPOSURE	EXPERIMENTALS	CONTROLS
1 Whole Word Method	800	1 074
2 Left to Right	855	1 210
3 Right to Left	1 180	761

It is only in the right-to-left method of exposure that the experimentals exceed the controls in the ratio of reversal to nonreversal errors   This affords a certain support to Orton's view, since one would expect the right-left order of presentation to precipitate reversals with the inefficient reader who, by hypothesis, favors this direction   It is a fact, however, that the normal reader makes more absolute reversals in this situation, which Wolfe accounts for as follows   The good reader sees that the right-left exposure does yield a good word in many cases, and readily falls in with the "set" to report them   Again, Miss Wolfe is perhaps right in the opinion that the differences between the ratios of experimentals and controls are not reliable (8)   Her tachistoscopic material was loaded with reversal words, but in spite of this the normal reader made only about one or two reversal errors in 100 trials   It must be noted, however, that the retarded readers made from 10 to 13 reversal errors in 100 trials

ORTON'S THEORY AND THE READING OF COLLEGE FRESHMEN

Our own experimental tests of Orton's theory grew out of a chronic difficulty attending the remedial reading work which the author has been giving to Wells

College freshmen since 1936   Although we found it possible to bring about an average improvement of about 22 per cent in reading ability (considering both speed and comprehension) after only six remedial reading sessions spaced at intervals of one week, still there are always some four to six subjects in every group of 50 who show no material gain at the end of such periods (6)   The subjects of such failure show no trait or set of traits which distinguish them clearly from students who make good improvements   Studies of visual and auditory imagery dominance, intelligence level, or personality traits fail to distinguish them as a special class   In 1939–40 an attempt was made to determine whether or not these subjects show the symptoms which Orton attributes to strephosymbolics   Two groups of students (sophomores) were formed from subjects of the previous year's remedial reading group   Table 2 gives initial comparisons of the two groups, one characterized by high gain, and the other by low gain in the remedial reading work

TABLE 2

INITIAL SCORES OF HIGH- AND LOW-GAIN READING GROUPS

	MEASURES	Low	HIGH	DIFFERENCE
1	Number of Cases	14	13	
2	Average A C E Intelligence Score	107 4	113 0	5 6
3	Nelson-Denny Paragraph Reading Score	49 4	43 2	6 2
4	Percentages of Gain after Six Weeks	—13 4	35 3	48 7
5	Average Freshman Grades (in Courses)	70 6	77 5	6 9

The crucial difference between these two groups lies in their capacity to profit from the work in remedial reading   The low-gain group shows an average loss of 13 4 per cent, but about one-half of them did show small gains   The losses and small gains, we believe, are in part due to the fact that Form B of the Nelson-Denny Test (given finally) is more difficult than Form A (given initially), but the high-gain group made a gain of 35 per cent on the average in spite of this   There is also the consideration that reading skill may show day-to-day fluctuation, and that one might get spurious evidences of gain or loss if one trusts to but one initial and one final test   The author is at present engaged in a study of such function fluctuation in the sphere of reading

The subjects in these two groups were given group tests designed to bring out relevant symptoms as follows

1 *Tests of reversal tendency*   One hundred "flash cards" designed to reveal reversal tendencies were exposed for short intervals on a screen, the subjects giving immediate records after each exposure.   The materials on the 100 cards consisted of number series, letters, nonsense words, and meaningful words   The subjects took the reversal tests in small groups of five subjects.   The results were scored for three error categories   right-left reversals (r), errors (e) consisting of reporting items not present, repeating items present, inversions not involving right-left reversal, omissions (o), the failure to report items present or called for

2 *Spelling test*   A list of 50 words was selected as a suitable spelling test for the subjects   These words were pronounced and then defined (for identification) by the experimenter, and the subject "spelled" them in writing   The score was two points for each word correctly spelled

3 *Mirror writing test*   Subjects were given one minute each for three writing assignments   (a) writing "Mary had a little lamb   ," etc, in normal fashion

with the normally used hand, *(b)* writing the same verse backwards with the normal hand, and *(c)* writing it backwards with the hand not normally used in writing   The score in each case consisted in the number of letters legibly written

4 *Calculation with and without distraction*   This test was not prompted by any consideration of Orton's views, but serves as an additional test to check the writer's impression that the subjects in the low-gain group show marked distractibility   The task consisted in solving two equivalent lists of arithmetic problems, the first without distraction, and the second while three metronomes beating at different rates served as distractors   In a second test, the distraction consisted in having the experimenter read aloud a random list of numbers while the subject was working on the second list of arithmetic problems   On the usual assumption that poor readers make use of voco-motor imagery, the voice should be particularly distracting to them

5 *Perseveration tests*   Also unrelated to Orton's views, these tests were intended as merely exploratory tests of "mental set and shift" in good and poor readers   We first measured the skill of each subject in writing the alphabet in capitals in forward direction, and the numbers from 100 to 0 in forward direction   In the second part of this test, alternating these two activities was required, that is, the subject must write A, 100, B, 99, etc

RESULTS OF THE EXPERIMENTS

Reversal errors *(r)* were divided by the sum of all other errors, giving a quotient that gets progressively larger as the *r* errors exceed the *non-r* errors   Similarly, in the distraction tests, the score of the nondistraction period was divided by the score during distraction   the larger the quotient, the greater the distractibility of the subject   In the perseveration test, the average of the two single-task scores was divided by the alternating-task score   the larger the quotient, the greater the susceptibility to perseveration, *i e*, the greater the subject's difficulty in alternating tasks

The results of these experiments are given in Table 3 in the form of "critical ratios," *i e*, the differences between the corresponding averages of the two groups are divided by the standard errors of the differences   The last column to the right gives the probability that the differences found are true differences on the basis of 100

TABLE 3

CRITICAL RATIOS OF DIFFERENCES BETWEEN LOW- AND HIGH-GAIN GROUPS

	THE MEASURES COMPARED	GROUP SCORES Low	GROUP SCORES High	SE_{diff}	PROBA-BILITY
1	Sum *r* Divided by Sum *e*	1 320	713	(+) 2 524	(+) 99 4
2	Sum *r* Divided by Sum *e*+Sum *o*	282	212	(+) 1 833	(+) 96 0
3	Sum *r*+Sum *e*+Sum *o*	101 100	78 100	2 009	98 0
4	Spelling Test	79 900	86 600	(+) 1 716	(+) 96 0
5	Normal–Nonnormal Reversed Writing	2 390	2 120	(—) 249	(—) 60 0
6	Normal–Normal Reversed Writing	1 600	1 630	(+) 171	(+) 57 0
7	Arithmetic Test Normal Score Minus Metronome Distraction Score	962	999	482	68 2
8	Arithmetic Test Normal Score Minus Voice Distraction Score	899	892	084	57 2
9	Perseveration Test Ratio	1 510	1 520	114	54 4
10	Average Freshman Grades, 1938–39	70 600	77 500	3 760	100 0

The results which favor Orton's views are marked with plus signs in the last two columns to the right in Table 3 The first two lines show that the low-gain subjects make more r errors relative to e and o errors (e includes all nonreversal errors other than omissions) The quotients resulting from dividing the differences between the group averages by the SE's of the differences are not large, and yet they are large enough to be significant The third line shows, in agreement with Wolfe, that the poor readers make more errors of all kinds than do the good readers Line 4 shows that the low-gain group is inferior in the spelling test, but the difference is again not perfectly reliable In line 5, the score of the subject while writing in right-left progression with the hand not normally used in writing is subtracted from the score made in normal left-right writing with the normally used hand On the view that nonreaders have a native tendency to progress from right to left, they should show smaller score differences in the two writing situations than do the high-gain groups On the contrary, however, the high-gain group shows relatively better skill in reversed writing, hence the final ratios and probability values in line 5 are marked "minus " In line 6, however, the low-gain group does show relatively more facility in writing in reversed fashion with the normally used hand, but the difference has the low probability value of only 57 Lines 7, 8, and 9 show that we found no reliable differences between the low-gain and high-gain groups in regard to the distractibility and perseveration tests The good readers were slightly more distracted by the metronome, the poor readers by voice distraction The perseveration tests, of course, were entirely too few to measure group differences adequately The most reliable difference found between the two groups concerns the average college grades earned during the freshman year The low-gain group seems characterized by a general incapacity to improve with opportunity and practice

A legitimate objection to our findings regarding reversal errors would be to say that reversal errors in the normal reading situation would be fewer in number than in our tachistoscopic tests Our set-up, like Wolfe's, was to a great extent deliberately designed to precipitate reversal errors The words "was" and "saw" would hardly be confused when they occur in a meaningful context And yet, stubborn reversal tendencies might have the effect of slowing up reading rate

In 1941–42 the 100 reversal tendency test cards were again presented to 38 freshmen taking the remedial reading work As before, two groups were formed, alike in initial reading and intelligence scores, but differing in the benefits derived from remedial reading A high-gain group of 11 subjects made an average gain of 38 per cent after nine weeks of remedial reading, while a low-gain group of 10 cases made a corresponding gain of only 5 per cent The results of the reversal tendency tests supported the findings of the 1939–40 study just reported The low-gain group showed larger ratios of r over e and o errors, the critical ratios of r divided by e being 1 023, the critical ratio of r divided by $e+o$ was 1 428

CONCLUSIONS

The main concern of this article was to examine the incidence of reversal errors in the reading of low-gain and high-gain groups of readers taking a series of remedial reading exercises The fact that all degrees of reversal tendency may be found among readers, i e , the fact that "types" do not exist is no disproof of the theory of strephosymbolia, since Orton holds that there may be degrees of conflicting dominance The finding that reversal errors are normally characteristic of an early age, yielding eventually to normal left-right progression, might seem quite adverse to Orton The writer is not convinced that this is the case Most studies

of reversal tendency report only massed averages   Among the subjects there may indeed be some 2 or 4 per cent whose reading difficulties are primarily due to reversal tendencies, and whose reversal errors, considered apart from group averages, may be large   It would be tenable to suppose that the reversal tendencies in such cases arise from conflicting directional tendencies of a *functional* nature, rather than from structural antitropic arrangements of cerebral areas   Again, if such cases exist, it is unlikely that they will be found among college students, since educational selection would eliminate them   Studies like the one just reported would be much more pertinent in the lower grades

Our own experiments, made in two separate years, do show that freshmen who fail to profit from remedial reading work do make more reversal errors in proportion to other errors   These low-gain cases are also inferior to others in spelling and in average college grades   The differences in regard to reversal errors are not completely reliable, but they are extensive enough to deserve the renewed attention of students of the psychology of reading   No significant differences were found between low- and high-gain groups in regard to general intelligence scores, "mirror-writing" skills, susceptibility to distraction and to perseveration tendencies

REFERENCES

1 HILDRETH, G   Reversals in reading and writing   *J educ Psychol* , 1934, 25, 1–20
2 JASTAK, J   Interferences in reading   *Psychol Bull* , 1934, 31, 244–272
3 ORTON, S T   *Reading, writing and speech problems in children.*   New York   Norton, 1937
4 ORTON, S T   The "sight reading" method of teaching reading   *J educ Psychol* , 1929, 20, 141
5. TEEGARDEN, L   Tests for the tendency to reversal in reading   *J educ Res* , 1933, 27, 81–97
6 WEBER, C O   The acquisition and retention of reading skills by college freshmen   *J educ Psychol* , 1939, 30, 453–460
7 WOLFE, L S   An experimental study of reversals in reading   *Amer J Psychol* , 1939, 52, 533–561
8 WOLFE, L S   In a letter to the author

WHY DOES THE SPEECH OF STUTTERERS IMPROVE
IN CHORUS READING?

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THE oral reading of stutterers improves greatly when they read in unison with another person The explanations that have been given for this phenomenon fall into two classes (1) those which state that the hearing of another person's speech has a direct facilitating effect upon the speech of the stutterer, and (2) those which assume that the unison reading affects the stutterer's performance indirectly by removing the emotional tension which is the primary cause of stuttering This emotional tension is supposed to be relieved because in the situation involving unison reading the subject does not experience any "burden of communication" or because his speech is rendered less prominent or outstanding in the total situation

The theory of Bluemel, who conceives of stuttering as the inhibition of the conditioned reflexes of speech, is an example of the first type He writes

> When other persons speak in unison with the stammerer their words furnish the conditioned stimulus for which his speech is the conditioned response In Pavlov's terminology the reflex is supported or reinforced, hence it proceeds without inhibition (3, p 86)

It should be remarked that a conditioned reflex is not reinforced, in Pavlov's terminology, by presenting the conditioned stimulus, what Bluemel seems to have in mind is a reinforcement or strengthening, through external stimulation, of the internal nervous patterns which initiate speech

Fletcher's theory belongs to the second type His general view of stuttering is that it is a disorder not of speech but of communication Where there is speech but no communication, there is no stuttering, hence, when a stutterer speaks aloud when he is entirely alone, his speech improves Likewise, in unison reading there is no burden of communication resting upon the subject He writes

> The author's subjects with whom he tried out reading in unison   reported, as their explanation of their relief from stuttering that in reading with someone they did not have the feeling that the sole responsibility was resting upon them, and that if they "got stuck" the other person would keep going   Consciousness of social demands   is a determining factor affecting the stutterer's ability to speak (6, pp 239–240)

Miss Virginia Barber has developed a theory of the same type as Fletcher's and bases it upon a thorough experimental study, in which subjects read in fourteen different situations Since stutterer and accompanist did not always read identical material, she uses the term "chorus reading," which is broader than "unison reading." Her conclusions are, in part

> Chorus reading tends to be more effective in decreasing the frequency of stuttering when the stutterer receives the more "support"—that is, when there are several persons reading along with him—and when the material read by the cooperating readers is the same as that read by the subject

It is interesting to note that the point at which there occurred the most marked breaking down of the distraction came when there was a transition from reading in unison with the cooperating readers to the reading of different material. It would appear from this and from the performance in the remaining situations that the stutterer tends to speak most fluently when his performance is not easily differentiated from the total activity at the moment. It seems likely that so long as he knows that the whole activity will go on, he does not place so high an evaluation of his own part in it—and, in consequence, tends to perform more efficiently. When the cooperating readers start reading different material, it devolves upon him to speak well, for his inadequacy would then become conspicuous. The more important it becomes for him to speak well, the more likely is he to stutter. In other words, the more positively he evaluates fluency, the more he resists non-fluency—and in consequence, the more he stutters. (2, pp. 382–383)

In a study by Eisenson and Wells (5) subject and experimenter read in unison before a microphone, first merely as a rehearsal without communication and again when the subject's voice was to be transmitted to listeners elsewhere. These authors believe that their data show that their subjects' speech was poorer in the second situation, but the size of the mean increase in errors is greatly affected by the data of one subject, the omission of which causes the mean to drop from 60 to 10 per cent; moreover, seven of their nineteen subjects actually spoke better in the first situation, while for four there was no difference. The data therefore seem to fall short of adequate support of the authors' conclusion.

METHOD

The observations which led Fletcher and Barber to emphasize responsibility for communication and salience of the subject's performance are seriously deficient in that they do not include situations in which there is chorus reading and in addition the two factors just mentioned. Such a situation can be easily arranged, the subject can read before an audience while chorus reading of another person is conveyed to him through a telephone.

In our experiments the subjects read in the following six situations in the order indicated:

1. The subject read alone. The audience consisted of three persons including the senior writer P. On a few occasions the audience contained four or five persons.

2. The subject read while P read the same material in unison with him. P tried to read so that he and the subject would be pronouncing the same word at all times.

3. The subject read while he listened to P, who was in a distant room and read the same material in unison with him. P's reading was conveyed to him by telephone; P heard the subject's reading and thus was able to keep in unison with him.

4. The same as situation 2, except that the two readers read different material.

5. The same as situation 3, except that the two readers read different material.

6. The subject read alone.

In situations 3 and 5 there is responsibility for communication to the audience, and the stutterer's performance does not merge into a background as it does when the audience hears both readers. If the presence of these factors induces the emotional tension which leads to stuttering, then subjects should stutter more in these situations than they do when the accompanying reader is heard by the audience. Situations 4 and 5 were included in order to compare the efficacy of the reading of different material in a face-to-face situation and in a telephone

situation, we know from the work of Barber that such chorus reading face-to-face is effective in improving the subject's speech

Twelve subjects were used, five were adults, and seven were between twelve and seventeen years of age Some of the most severe stutterers required twenty-two minutes to read 550 words, while some of the less severe stutterers who were free from tonic spasms could read the same selection in less than four minutes

The reading material was that used by Professor Eugene Hahn in one of his experiments (7) We are grateful to him for permission to use this ingeniously constructed material, which consists of four selections of 550 words each Each selection contains the same words as the others, but they are arranged in different orders and the sentence structure is different The same story is told by each selection The four materials, numbered as they were by Hahn, were used in the following order in our six situations 1, 2, 3, 4, 1, 2

The words on which the subjects stuttered were marked by the junior writer, who has been engaged in the practice of speech correction for several years Her accuracy was tested by marking the number of times stuttering occurred in the reading of two subjects, which had a total duration of 69 minutes and was recorded in phonograph discs The number of words on which stuttering occurred was marked by her while these subjects read and was within 3 per cent of the number later obtained from the records

RESULTS AND CONCLUSIONS

The data presented in Table 1 show that the performance of all subjects improved greatly in situations 2 and 3 (unison reading). The improvement was greater in situation 2 for six of the subjects, while it was greater in situation 3 for the remaining six The reading of different material also decidedly improved speech, here again the subjects were almost equally divided, six having fewer blocks in situation 5, five in situation 4, and one showing no difference

The means show that the two telephone situations were, on the average, somewhat more difficult than the corresponding face-to-face situations However, the difference shown in the table between the mean percentages for situations 2 and 3 (10 4 and 16 1 per cent, respectively) is very much influenced by the data from subject L, who was a severe stutterer and had a great deal of trouble in her first reading with telephone accompaniment If this subject's results are omitted, the differences become smaller, the percentages being 6.6, 8 1, 46 0, 46 8, and 73 8 for the last five situations, respectively If we consider the medians, which are not so much affected by extreme cases as the means, we find that they are identical for situations 4 and 5, and for situations 2 and 3 the trend shown by the means is reversed, the telephone situation producing the smaller median The results for situation 6 show that adaptation occurred for all but one subject [1]

_____

[1] It is possible to subject the data to statistical treatment to determine the significance of the differences between the means, using the usual technique for small samples with correlated variables Such treatment would add or subtract nothing from whatever conviction the data may carry to the reader, since the very great range of the number of blocks (18 to 423 in situation 1, for example) results in relatively large standard errors of the means and hence leads to the conclusion, after the statistical work is done, that the differences (except so large a one as that between the means for situations 1 and 2) are not statistically significant The difference between the means for situations 1 and 6 is found not even to have "significance at the 20-per-cent level," although the fact of adaptation which this difference represents is as well established as any other in the field of stuttering

TABLE 1

THE NUMBERS OF BLOCKS EXPERIENCED BY THE SUBJECTS IN THE SIX SITUATIONS

SUBJECT	SITUATION					
	1	2	3	4	5	6
A	245	7	10	168	185	332
B	53	1	3	5	8	28
C	20	6	4	5	4	8
D	160	27	39	64	70	65
E	68	5	4	6	6	16
F	18	5	3	22	19	20
G	320	12	7	132	140	256
H	89	1	11	63	54	64
I	105	1	5	41	44	44
J	58	6	4	19	8	18
K	50	7	6	20	17	24
L	423	90	163	238	271	384
Totals	1609	168	259	783	826	1259
Means	134 1	14 0	23 1	65 3	68 8	104 9
Means expressed as percentages	100	10 4	16 1	48 7	51 3	78 2
Medians	78 5	6	5 5	31 5	31 5	36
Medians expressed as percentages	100	7 6	7 0	40 1	40 1	45 9

The results and their general consistency justify the conclusion that chorus reading is just as effective when transmitted by telephone as it is when the accompanying reader is present. One might reasonably expect that the telephone situations would be more difficult, since the task is an unusual one and one for which the subjects had had no training whatever and since the transmitted speech is less loud and less intelligible than it is otherwise

The results lend no support to the theory that unison or chorus reading improves speech because it reduces emotional tension by removing the burden of communication or by diminishing the salience of the subject's performance. They are consonant with theories which assume that the hearing of such reading exerts a direct effect on the stutterer's speech by reinforcing the nervous patterns which are preliminary to the act of speech. This direct effect may be assumed to result from any speech which the subject hears as well as from speech which is identical with his. In the latter case, that of unison reading, his speech improves still more than it does when he hears non-identical speech, and this latter increment of improvement may be supposed to be due to the following factors

1. The unison reading acts as a pace-maker. The accompanist reads at a regular rate, and the influence of this rate is like the favorable effect of the metronome in experiments in which the subject has to read each word on the beat of the instrument. The unison may, in other words, impose a rhythm on the subject's reading, which is always favorable

2 When the accompanying reader gets somewhat ahead of the subject, the hearing of a spoken word may facilitate the stutterer's attempt to speak the same word a moment later   That such a specific effect exists is made probable by such considerations as those contained in F H Allport's discussion of the mechanism of the conditioned reflex in the acquisition of language by the child (1, pp 178–189)

The results of this study seem to us to make a slight contribution to the theory that emotional tension is not the cause of stuttering   If that theory is correct, one may ask, how can we explain the fact that stutterers speak well when alone?   Is not this fact to be explained by the removal of the subject from the social contacts which produce emotional strain and stuttering?   It may be argued by those who put these questions that a theory like that of Bluemel leads to the conclusion that a stutterer in the "primary stage" described by Bluemel and others should stutter when alone, the inhibition of the "conditioned reflexes" is supposed to be independent of social situations   Also, stuttering is to be expected in the "secondary stage," since the subject has become conditioned to certain sounds and words and also to the social situations in which he has had difficulty   These deductions seem to us to be correctly made   But we may question whether stutterers do actually speak so very perfectly when alone   Hahn (7) has shown that the majority of stutterers do have difficulty when speaking alone   While he found some who spoke almost perfectly when alone, his subjects had, on the average, about half as many blocks when alone as they had when speaking to another person   The often-repeated statement as to the perfection of the speech of stutterers when they are alone, which Hahn's finding contradicts, may have resulted in part from the fact, also discovered by Hahn, that subjects when speaking alone and recording their blocks usually record only a fraction of those which a concealed observer notices   Moreover, Hahn reports that changes in speed and rhythmic pattern which he observed in the speech of subjects speaking alone may have contributed to the lessening of stuttering in this situation   Therefore we think that the facts on this point which have been reported up to the present time do not go against a theory which minimizes emotional tension as a cause of stuttering

SUMMARY

In order to test the theory that stutterers' speech improves when they read in unison with another person because such a situation relieves the subject of the responsibility of communication or reduces the prominence of the stutterer's performance, experiments were performed in which the stutterer read before a small audience while the unison reading of another person was conveyed to him by means of a telephone   In such a situation there is responsibility for communication to the audience and the subject's performance "stands out from the background" as strongly as when he reads alone   The experiments showed that the subjects read as well in this situation as they did when the other reader was present before the audience   It was also found that when subject and accompanist read different material in the experiment with the telephone there was as much improvement as when the other reader was present   It is therefore concluded that "the burden of communication" and the salience of the stutterer's performance are negligible factors in the improvement which is produced in situations involving chorus reading

REFERENCES

1 ALLPORT, F H   *Social psychology*   Boston Houghton Mifflin, 1924

2 BARBER, V   Chorus reading as a distraction in stuttering   *J Speech Disorders*, 1939, 4, 371–383

3 BLUEMEL, C S   *Stammering and allied disorders*   New York Macmillan, 1935

4 BLUEMEL, C S   *The troubled mind*   Baltimore Williams & Wilkins, 1938

5 EISENSON, J , & WELLS, C   A study of the influence of communicative responsibility in a choral speech situation for stutterers   *J Speech Disorders*, 1942, 7, 259–262

6 FLETCHER, J M   *The problem of stuttering*   New York Longmans, 1928

7 HAHN, E F   A study of the relationship between the social complexity of the oral reading situation and the severity of stuttering   *J Speech Disorders*, 1940, 5, 5–14

MENTAL DETERIORATION IN SENILE PSYCHOSIS

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THIS study was undertaken in an effort to probe the qualitative aspects of senile deterioration in a group of institutionalized subjects, and to relate observed losses to results obtained from a standardized quantitative scale   Wegrocki (6), Goldstein and Scheerer (3), and others have reported an inability to function at an abstract level, or on a conceptual basis, on the part or those with certain functional and organic disorders, and the Object Sorting Test described by the latter authors was used in this study as a criterion of this ability   The Wechsler-Bellevue Adult and Adolescent Intelligence Scale (5) was administered to all subjects to determine whether or not significant patterns of successes and failures on the various subtests could be related to performances at abstract or concrete levels

Twenty institutionalized senile patients were used as subjects, selected on the basis of their ability to cooperate and converse to the extent demanded by the tests   The age range was from 64 to 83, with a mean of 75 1 years and a median of 75   A group of five cases with a diagnosis of schizophrenia was also studied so that gross comparisons could be made with the results of other studies in which the same techniques have been used

The Object Sorting Test was used in accordance with the directions described by Goldstein and Scheerer (3, pp 102–108)   A few minor changes were made in each group of objects, necessitated by the unavailability of some items locally   The Wechsler-Bellevue IQ's for each senile subject were determined by the extrapolation method suggested by Wechsler (5, pp 216–217)

Table 1 presents a summary of Wechsler-Bellevue Scale results together with an indication of the type of response of each subject on the Object Sorting Test   Full-scale IQ's could not be obtained for some subjects because of zero scores on one or more of the subtests or a refusal to respond to such content.   Any failure to respond was scored as "no response" regardless of the possible basis, such as lack of comprehension or reduced sensory acuity

It is apparent in Table 2 that many of our senile subjects made low or zero scores on the performance subtests   These results are in general agreement with those of Wechsler (5), Beeson (1), and Gilbert (2), who hold that the ability to perform certain tasks shows marked deterioration with age, but other types of response are not affected in like degree   Wechsler reports that the specific subtests in his scale which do not "hold up" with advancing age are Memory for Digits, Digit Symbol, Picture Arrangement, Block Design, and Similarities   Our subjects evidenced a marked inability to handle adequately the Block Designs and Digit Symbol Tests, and frequently the Object Assembly Test as well   Wechsler found that the tests which do "hold up" with advancing age are Information, Comprehension, Object Assembly, Picture Completion, and Vocabulary   Our subjects, regardless of their performances on the Object Sorting Test, tended to make the highest quantitative scores on the Comprehension Test, with fairly consistent scores on the Vocabulary, Information, and Similarities subtests   Thus

TABLE 1

WECHSLER-BELLEVUE SCALE RATINGS

CASE	IQ RATINGS ON			
	FULL SCALE	VERBAL SCALE	PERFORMANCE SCALE	SORTING TEST
A	112	120	110	A
B	96	101	103	A
C	91	93	104	A
D		98	0	C
E		74	0	C
F		90	0	C
G	95	98	107	C
H		101	——	C
I	71	71	86	C
J		77	0	C
K		98	0	C
L		79	0	C
M		91	0	C
N		95	0	C
O	95	101	103	C
P		——	115	A
Q		66	0	C
R		71	——	A
S		87	0	C
T		——	——	C
U		88	——	A
V	103	101	104	C
W	102	105	98	C
X	93	89	98	C
Y	78	89	68	C

Cases A through T are senile psychotics
Cases T through Y are schizophrenics
A and C in the last column indicate abstract and concrete sortings respectively
Dashes indicate no responses

our results for the Object Assembly and Similarities Tests are not consistent with the data reported by Wechsler

The senile group experienced unusual difficulty with the tests comprising the Performance Scale, as evidenced by the fact that their scores were markedly inferior to those of younger subjects with relatively equal verbal test scores   In several instances the senile subjects openly complained of the difficulty of the performance tasks and were unable to make significant progress toward successful solutions   In view of their levels of verbal comprehension these difficulties were probably more fundamental than an inability to understand the instruction   The response of the schizophrenic subjects did not reflect this inability to handle performance materials as their scores on the verbal tests were roughly comparable to those on the performance tests   Although our group of subjects is too small to warrant definite conclusions, these results indicate the possibility of the existence of qualitative differences in the loss of function in senile deterioration compared to that in schizophrenia

An examination of the qualitative aspects of the performance of the senile and schizophrenic groups on the Object Sorting Test discloses several important

factors   The senile subjects who were unable to sort the objects on an abstract basis actually grouped them according to their use, and only when the objects were thus related could a grouping be effected   With the five exceptions to be noted later the senile subjects were unable to adopt the abstract attitude and group the objects on a conceptual basis such as color, material, or shape   It was found, however, that some subjects were able to sort in an apparently increasingly abstract manner as the possible bases of sortings were narrowed toward a single conceptual principle   Only those who spontaneously sorted on an abstract basis succeeded on Parts I, II, or III (handing over, sorting, or shifting respectively) of the Object Sorting Test   Only when Part IV, coercive sorting, was reached could the remaining subjects recognize and report the relationships between various objects, and even then the indicated relationship referred to a specific situation context or non-immediate situation   When the possible relationships were further restricted, as when two red objects were presented, the subject was at last able to recognize the common property of "redness"   Further exploration disclosed the fact that this was merely an example of "sensory cohesion'" and not a true abstraction   Thus, a hierarchy of ability to sort objects was found   When a variety of objects was presented in random order (Steps I and II) the subjects were unable to make consistent or inclusive groupings   When the objects were more restricted as to possible relationships (Step IV), as when all metal or all red objects were pre-

TABLE 2

WEIGHTED SCORES ON THE WECHSLER-BELLEVUE SUBTESTS

CASE	I	C	A	D	S	V	PC	PA	OA	BD	DS	SORTING
A	13	14	10	7	14	—	8	6	4	7	2	A
B	7	5	9	4	10	—	4	0	7	3	2	A
C	5	11	0	7	4	—	4	4	6	1	2	A
D	8	12	4	6	2	10	2	0	0	0	0	C
E	3	3	0	0	3	—	0	0	0	0	0	C
F	2	6	1	9	4	8	0	0	0	0	0	C
G	4	10	7	4	7	10	6	1	9	1	2	C
H	8	11	6	4	5	14	—	—	—	—	—	C
I	2	2	0	4	2	7	4	1	3	1	0	C
J	3	6	0	0	1	6	6	0	0	0	0	C
K	8	9	1	3	9	—	2	0	0	0	0	C
L	3	4	0	0	1	0	1	1	0	1	0	C
M	1	7	0	6	8	6	0	1	0	1	0	C
N	3	9	4	6	5	10	4	1	0	1	0	C
O	6	13	4	6	4	13	6	1	0	3	2	C
P	4	—	—	—	—	10	4	3	8	1	3	A
Q	1	2	0	0	2	3	0	0	0	0	0	C
R	1	3	0	0	1	5	—	—	—	—	—	A
S	4	6	4	4	4	6	1	0	0	0	0	C
T	—	—	—	—	—	—	—	—	—	—	—	C
U	6	10	3	7	8	9	5	—	2	—	—	A
V	10	15	7	9	6	—	12	14	7	10	6	C
W	9	13	9	9	11	10	9	7	8	10	10	C
X	7	9	9	4	9	—	7	10	11	9	10	C
Y	10	11	7	4	6	8	4	4	5	5	6	C

Cases A through T are senile psychotics
Cases U through Y are schizophrenics
A and C in the last column indicate abstract and concrete sortings respectively
Dashes indicate no responses

sented, many were able to identify a relationship on the concrete basis of use At last, when a very small group of objects, related in only one way, was presented the subject was able to report the relationship Even under these conditions the reported grouping did not invariably indicate a recognition of an abstract relationship For example, subject J finally agreed that the red portion of a pencil and a red ball could go together because both were red, but when a red wax apple was substituted for the ball she reported that the two could go together "—because we might want to send the apple somewhere and would need a pencil to write the name—" The report of redness as a basis of grouping did not represent an appreciation of redness as an abstraction in the usual sense of the term Similar reports by other subjects tend to confirm the findings of Hirsch (4) that the senile patient tends to perceive and define objects not in the light of the abstract characteristics such as size or shape, but in regard to use Similar results were obtained from the four schizophrenic patients who did not sort the objects on an abstract or conceptual basis

It would seem reasonable to expect that the best criterion of the subject's basis of sorting as predicted by the Wechsler-Bellevue Scale would be the Similarities Test This requires the identification of a relationship between pairs of objects such as "dog-lion" and "daily paper-radio" However, many of our subjects, both seniles and schizophrenics, whose sortings were limited to the concrete level, were nevertheless able to describe in verbal terms an apparently abstract relationship between the members of such pairs For example, subject K, who responded to a group of metal objects "Yes, they are all metal but they are not silverware so they could not belong together" reported that an orange and a banana were both fruits, a wagon and a bicycle were "to carry people," a radio and daily paper "to carry information," and air and water as "necessary to life" Thus it appears that a verbal response which apparently implies the recognition of an abstract relationship does not necessarily indicate that the subject is capable of recognizing conceptual relationships when faced with an objective situation The ambiguities and uncertainties in the meanings of words may completely hide an inability which becomes obvious in other and apparently more simple test situations In other words, we find that while the behavior on the quantitative verbal scale seems to be relatively unimpaired and operating at a high level of efficiency, yet a qualitative examination of the same ability brings to light a marked impairment in the generalizing ability of the subject, and yields evidence of behavior at an abnormally concrete level This distinction was noted by Goldstein and Scheerer

The patient may be able to utter the same words as the normal person does, but the meaning implied in his utterances may be quite different from the normal person's speech, without the observer's being able to notice this fact from the uttered or written words as such In this way the patient may seem to produce a performance which actually is not within his capacity (3, pp 10–11)

It is possible, then, that verbal usage is not the last function to be affected by deterioration but rather that the verbal indication of this loss disappears in the indefiniteness of verbal meanings

Although no single test in the Wechsler-Bellevue Scale seems to bear a direct relationship to the type of response obtained on the Object Sorting Test it is apparent that the entire battery of subtests comprising the Performance Scale is of some predictive value Excluding patient R, whose cooperation and interest were not entirely satisfactory, all patients who successfully grouped the Sorting Test objects on an abstract basis also achieved some successes on the performance tasks A study of complete case records and test protocols for patients A, B, C,

and P (who sorted objects at an abstract level) does not disclose any factors which serve to differentiate them from the other senile subjects   Cases G, I, and O responded in a consistently concrete manner on the Object Sorting Test, but also made fairly good scores on the Performance Scale, and no distinguishing factors were found in their case records or test protocols   Thus it appears that the Performance Scale scores may serve as a rough criterion of the probable ability of a patient to sort objects on an abstract level, but the number of exceptions are such that a detailed check is necessary on the basis of actual performance   Our data indicate, however, that a low or zero score on the Performance Scale together with a much higher score on the Verbal Scale is accompanied by an inability to handle the type of abstractions necessary for success on the Object Sorting Test in practically all instances

The fact that eight senile patients with Verbal Scale IQ's within the average range or above were unable to sort objects on an abstract level indicates that something other than the measured level general intelligence is involved   Some patients, whose sortings were entirely concrete, received higher IQ's than others who were able to sort the objects on an abstract basis   The inability to generalize and recognize conceptual principles as is required by the Object Sorting Test seems to be relatively independent of the measured level of general ability in psychotic subjects

CONCLUSIONS

With the reservations essential in a small sample study of pathological subjects, the following general conclusions seem to be warranted on the basis of the obtained data

1 The majority of institutionalized senile patients are unable to sort objects on the basis of conceptual or abstract principles, but are limited to such concrete bases as use and reality in a non-immediate situation in their classifications   Their sortings are qualitatively similar to those made by schizophrenic subjects

2 There appears to be a hierarchy of ability among senile patients, dependent upon the number of possible bases of sorting present in each group of objects   When the possibilities are sufficiently limited they are capable of identifying relationships, but solely of a concrete type

3 Members of both the senile and schizophrenic groups were able to respond to many of the verbal items in the Wechsler-Bellevue Scale on an apparently abstract verbal level, but were unable to sort objects on an abstract or conceptual basis   This appears to be due to the fact that a patient may use what seems to be an abstract verbal concept with much more restricted meaning

4 The ability to sort objects on an abstract basis seems to be relatively independent of the patient's level of ability as measured by the verbal portion of the Wechsler-Bellevue Scale

BIBLIOGRAPHY

1 BEESON, M F   Intelligence at senescence   *J appl Psychol ,* 1920, 4, 219–234
2 GILBERT, J   Mental efficiency in senescence   *Arch Psychol , N Y ,* 1935, 27, No 188
3 GOLDSTEIN, K , & SCHEERER, M   Abstract and concrete behavior an experimental study with special tests   *Psychol Monogr ,* 1941, 53, No 239
4 HIRSCH, E   Über Senile Denk- und Sprachstörungen   *Psychol Forsch ,* 1928, 10, 358–392
5 WECHSLER, D. *The measurement of adult intelligence*   Baltimore Williams & Wilkins, 1941
6. WEGROCKI, H J   Generalizing ability in schizophrenic. *Arch Psychol , N Y ,* 1940, 36, No 254

REVIEWS

MANUEL DE PSIQUIATRÍA   By Emilio Mira y López   Second edition, with an
   appendix *Anatomía patológica de las psicosis* by Braulio Moyano   Buenos
   Aires   Librería y Editorial "El Ateneo," 1943   Pp xii + 857

In view of the fact that the "field" of psychiatry has acquired the dimensions and
character of a morass, one of the most hopeful signs for psychiatry is the production
of a work that nevertheless betokens the opening of clear paths through the
morass's rank growth, sterile mudholes, and treacherous quicksands   That it is
a "handbook" solely by courtesy of the German convention about *Handbucher* in
fifty volumes or so—considering that it weighs around five pounds and would
fit Sancho Panza's saddlebags sooner than the practitioner's pocket—is in no way
an imputation of undue verbosity on the part of the author   That it does justice
to the "field" of psychiatry in a comprehensive and unified manner is testimony
to the author's peculiar fitness to write it, in terms of background, interests, and
experience   The breadth of recognitions, the clear flow of presentation, and
undoubtedly the serene dignity of the Castilian idiom, are in no small measure
responsible for the book's effectiveness

To the question as to how, apart from such triumphs of conception and style,
the author manages to bring the innumerable loose ends of psychiatric knowledge
and theory together into an inclusive and intelligible whole, the answer as revealed
in the work is a tacit formulation of the principal ways in which modern psy-
chiatry (or at least North American psychiatry) became a morass, it is likewise
a tacit formulation of the much-needed correctives

In the first place, Dr Mira y López consistently regards psychiatry as a *psycho-
logical* discipline   Making no assumption of materialistic causation, he holds
steadily in place the phenomenological filter and the functional meaning-matrix
which provide findings of a distinctively psychological order   Whatever may be
the neurological, physiological, and chemical needs in psychiatric treatment, atten-
tion to them can never replace or obviate the need for psychological understanding
and personological insight   There is no suggestion of any quarrel with neurology
as such or with physiology as such   A special appendix of more than 100 pages
is devoted to the anatomical aspect of mental disorders, other appended material
deals with electroencephalography, shock treatments, and psychosurgery   But
psychology remains the backbone of the author's version of psychiatry   There is
no sacrificing to the false gods of narrow and unenlightened "medical" specializa-
tions   While psychiatry is still defined as a form of medicine, the author includes
in nearly every chapter more genuine psychology than most of our physicians
will ever be aware of, and more than is officially required among us for a physician
to qualify as a "psychiatrist"   Psychologists who are becoming increasingly con-
cerned about the situation might profitably study this author's approach to their,
rather than his, problem

In the second place, the psychological climate in which the book's psychiatric
comprehension flourishes is that of personalism   This does not mean biased
adherence to a dogmatic system or even a fixed terminology, it signifies chiefly

the recognition that if any psychobiological characteristics and trends are entitled to be regarded as "personal" functions, they are the maladjustments, inadequacies, and disorientations which comprise the material of psychiatry Avowed indebtedness to William Stern and his unorganized coterie of contributors to personalistics is expressed in the two chapters on psychological orientation with which the book opens It has long been evident to students of Spanish and Ibero-American psychology that the traditional philosophical rooting of such psychology is in the sort of ground that also nourished German personalism Moreover, considering the distinguished contributions of Dr Mira's Spanish career to developmental psychology, differential psychology, and psychotechnics, it was inevitable that there should be influence from Stern, apart from the more remote matter of the psychological orientation of Spinoza and the scholastic philosophers At any rate, the successive treatment in the first or general part of the *Manual,* of alterations and disorders of sensation, memory, thought, language, affectivity, and action, never loses sight of the personality as a whole The specific emphases are always related to a total integration having "personal dimensions" and in effect implying "psychophysical neutrality" The result is an admirable appraisal of the facets of personality, each in turn considered in its "normal" and "abnormal" relationships

In the third place, the presentation of symptomatology without obliterating the outlines of the functioning organism and also without engulfing the discussion in material from case studies, is no easy task Dr Mira avoids the latter hazard by refraining from introducing case material The 17 chapters comprising the second or special part of the book are concerned with classification, syndromes, differential diagnosis, and treatment of disorders Included are chapters on mental hygiene, child psychiatry, and war psychiatry, the last presenting the chief content of the author's Salmon Lectures given in New York in 1942 and 1943 As to the effort to avoid intrusion of standardized lines of cleavage between the traditional clinical forms, complete success is not attained The present work, it should be said, is a completely rewritten and greatly amplified version of the first edition published in Barcelona in 1935 before the author's removal to Buenos Aires It continues to follow his five-fold classification of all psychological abnormalities as first presented in the original edition and as vindicated by eight years' seasoning and accumulated experience This classification is according to deficiency in capacity, deterioration, intrapersonal disharmony, chronic adjustive inadequacy, and isolation from reality Its merit lies in its departure from preoccupation with phenotypes and with the crude organic-functional distinctions essayed by medical classifications Several other classifications accepted by medical groups in the United States, Brazil, and elsewhere, are reproduced in outline for comparative purposes While Dr Mira's chapters are organized in accordance with his own arrangement, there is a perhaps unavoidable tendency for the old schemes and terminologies to slip into the picture here and there.

A further feature of Dr Mira's formulation of psychiatry is the tacit recognition, in evidence throughout the book, that psychiatric activity is an *art* as much as it is anything else Suppose one were to ask why and for whom this book was written at all? It contains 32 chapters of text material (667 pages) and seven appendices (164 pages), in its superficial organization it presents the findings of science pertinent to the main divisions previously described Thus about 20 pages are given to each capital topic, and the details are largely organized in outlines and syllibi The interpretations and theories considered are completely up-to-date The reference value to the psychiatrist of such a book is obvious, but it is necessarily limited, especially so in relation to a given case under treatment Students might

gain from it a fairly comprehensive general view of the field, which their lack of experience must render and keep superficial It is the really proficient and adequately grounded practitioner or theorist—like the author himself—who can appreciate it most greatly, *because he needs it the least!* Translated into English the *Manual* might convert some North American psychiatrists to psychology, but one is inclined to feel that it is pitched on too high a plane for their educational needs in this direction It becomes increasingly clear that while textbooks may adorn, only *philosophically adequate experience* can provide, the creative insights demanded by professional disciplines It thus becomes painfully evident that fragmentary specialization, currently regarded as the sesame to professional accomplishment, must sooner or later be replaced by a thoroughgoing respect for and mastery of a broad-scale orientation that alone can give significance to any special application

If Dr Mira's book can be influential in promoting such respect and in bringing in a new and happier intellectual regime where it is most needed, the morass of psychiatry will have a good chance of becoming an orderly field The debt to him on the part of all who are interested in the matter is very great As a representative now of Ibero-American psychology, he adds, through this work as through other contributions, a strong voice to the steady and insistent chorus sounding from the southern continent its awareness that the sciences of man prosper if endowed with a dimension of depth Members of this chorus—experimentalists like Dr Mira—know full well the productive use of our "brass instrument" procedures When are *we* going to learn the importance of their philosophy?

<div align="right">HOWARD DAVIS SPOERL</div>

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LA PERSONALIDAD Y EL CARÁCTER By Honorio Delgado Lima Editorial Lumen,
   1943 Pp 204

It becomes increasingly clear that, under the Good Neighbor or any other policy, patronizing appreciation of Ibero-American psychology is distinctly out of order Not only is it worthy of recognition in its own right as a distinctive contribution to Western scientific culture, but with telling if subtle emphases it seems to provide a positive corrective for the sterile eclecticism with which United States psychologists are currently all too familiar The point is well exemplified by Dr Delgado's latest work, this brief survey from a psychological point of view of the fields of personality and character

Here as in most Ibero-American offerings one finds psychological topics treated with a refreshing substantiality that seems on first acquaintance to signify merely the insistence that psychology is still, among other things, a philosophical discipline While this express insistence is by no means lacking, closer scrutiny discloses that basic to the psychological genius of a neglected area of the New World is a truth so simple and yet so profound that disregard of it in other circles is reminiscent of the story of Columbus and the egg The truth in question is the plain (some will say naive) and continual awareness that the study of any aspect of human nature must properly commence and proceed with considerations of the distinctively *human*

Dr Delgado, for instance, likes to refer informally to personality and character as one's "manner of being human" This allusion is in line with the assumption taken for granted throughout the book, that man's nature and destiny are distinctive, whence derives the unmistakable but never polemical implication that biologistic frames represent an inherently crude and inadequate approach of the subject-

matter   It is not recalled that the author once takes refuge in objective-seeming
references to "the organism" or even "the individual" in the manner characteristic
of our own preferred jargon of the present day   Quaintly, he discourses of *people,*
in the full expectation that they will possess the amplitude of people   It is startling
to arrive by such contrast at the realization that the psychological tradition which
now seeks in some quarters to recover its lost "soul" through the concepts of inte-
gration and the refurbished ego, lost more than a soul under the onslaughts of
positivism and empiricism, it lost its *humanity*

The expectation grows that the historian will some day demonstrate that another
psychological tradition—the Hispanic—lost neither its soul nor its humanity   In
the present instance, at least, both are represented in an approach that makes the
psychology of personality as much an ontological as a functional problem
Dr Delgado defines personality in terms of dispositions which, while remaining
subject to the influence of external situations, exercise a selection of situations and
are always interdependent with the total structure that they represent   Unless they
become manifested in some appropriate life context the dispositions remain latent
and elude empirical observation   They "do not come to operate as properties solely
because of their existence, their dynamogenic power, and the external stimulus, but
through their inclusion in all that is active and original in the personality, which
has an almost unlimited range of possibilities and represents a superior category
of determination although itself dependent on them" (p 126)   Linked with the
generic potentialities of the human species, they are nevertheless individualized,
probably by the biological genetic process, and individuality is further achieved
through their integration into personal hierarchical arrangements

Personality thus develops out of that which is given in a formal sense over and
above the adjustive mechanics of the "organism" from which other theorists some-
times derive functional interpretations of personality, often within a hedonistic
schema as for instance Stagner   As against empiricist formulations, Dr Delgado
supports the Aristotelian entelechy   With Klages he locates personality exclusively
within the category of the human, removing it from the phylogenetic context in
the usual evolutionistic sense   Genetics rather than physiology is the significant
biological field for personality

Consistently with this general view, Dr Delgado emphasizes values as the most
significant determinants of the perfecting and flowering of the more completely
manifested personality   Freely acknowledging the influence of Klages, Stern,
Dilthey, Spranger, Jaspers, and others, he nevertheless presents the outline of an
independent conception of human nature as linked with its destiny   Although
much Ibero-American thought has an obvious source in *Geisteswissenschaft,* a steady
current possessing both a Scholastic and a humanistic tinge marks it off from
German thinking with its inevitable tendency to resort to dialectics   The meta-
physics of value, which the author relates to his total portrayal without self-con-
sciousness or apology, belong naturally in his view to any thoroughgoing considera-
tion of human capacity and expression   In an inclusive sense personality is also a
spiritual entity, and there is no flinching about so denominating it

A man's personality amounts to what he might become   Whether or not he
fully achieves it, the "unlimited range of possibilities" is still determinative, and
these equate to universal processes and values   No personality can be analytically
"explained," especially by the procedures of differential psychology which in their
very logic imply statistical continua that controvert their own ends   Moreover,
those modifications which G Allport describes by the doctrine of "autonomy" of

motives must be viewed, according to Dr Delgado, always in reference to the structure of original and ultimate dispositions •

Into this conception of personality the more definite and accessible area of *character* fits as "personality manifested", character comprises the modes actually acquired by the dispositions of personality through expression in life situations Character traits represent the *natura naturata* of the *natura naturans* which is personality By virtue of this relationship, however, character may misrepresent the personality of which it is the manifestation There is no suggestion here of disposing of character as a formulation of values from some "outside" source Dynamically and otherwise, the ethos is one of the higher levels of personality integration, human nature is intrinsically social, and the ethos integration is realized when the motives to behavior are of the order of sympathy and love (Underlying this interpretation is the quasi-Thomastic doctrine of freedom, which the author does not discuss as such)

Commencing with definitions and methodology, the book discusses the structure, the evolution, and the dynamics of personality, in a long chapter reviews the typologies of Kretschmer, Jaensch, Pfahler, Jung, and Spranger, goes on to consider genetic factors and conditions of integration, and concludes with a chapter on characterography, which includes expressive and documentary diagnostics The book is complete with a five-page bibliography and indices, and is exceptionally well printed Very recent contributions to the field are included, and Dr Delgado's conceptions constitute a considerable advance beyond his previous formulations (*Psicología,* third edition, Lima, 1941, chapters 8 and 9) The work should stand as a valuable addition to the psychological literature on personality It is especially recommended to those who prefer Malebranche to Condillac

HOWARD DAVIS SPOERL

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PRINCIPLES OF BEHAVIOR AN INTRODUCTION TO BEHAVIOR THEORY By Clark L Hull New York Appleton-Century, 1943 Pp x+422

Behaviorism began as a program of denials and affirmations As such, it attracted disciples and flourished But it developed almost too fast, its solutions to problems were too pat, its claims extravagant, and by 1930 the trend was away from it toward the richer psychological conceptions of other dynamic systems, such as those of gestalt psychology, psychoanalysis, and less belligerent associationisms

Tolman's *Purposive Behavior* marked the beginning of a new era for objectivism Continuing behaviorism's protests against consciousness as psychology's subject-matter, Tolman rejected the atomistic-mechanistic simplicity of Watson's behaviorism for what he called a "molar" approach Cognitive problems, with which gestalt psychology had grappled, were taken seriously, and not disposed of by such simple expedients as "implicit habits," "sub-vocal speech" and other devices of primitive behaviorism Tolman's book differed so from conventional behaviorism that at the time it might have suggested behaviorism's disintegration rather than its revival

Hull has made a much more orthodox behaviorism a respectable contender for a place as an acceptable scientific system of psychology Hull's system is more continuous with the classical behaviorist tradition than Tolman's, but it incorporates many advances over Watson It would be a mistake to overemphasize either its continuity with behaviorism or its novelty It is an orderly and forward-looking

development of much that is best in behaviorism, without at any point seriously questioning the appropriateness of behaviorism for the solution of psychological problems

The system is like classical behaviorism in its emphasis upon stimulus and response, on habit, on the essentially algebraic interaction of response tendencies and inhibitions   It is avowedly mechanistic, anti-subjective, anti-teleological, anti-configurational   While the polemical material in the book is at a minimum, its position on these issues is clear

The system goes beyond Watsonian behaviorism in its interpretation of behavioral laws as molar (rather than molecular) although the interpretation is grudging, and the hope is expressed that ultimately there will be neurological foundations

Nearly all serious students of behavior like to believe that some day the major neurological laws will be known in a form adequate to constitute the foundation principles of a science of behavior   (p 19)

As part of the molar approach, the system makes use of non-observable constructs or intervening variables, such as habit strength and drive   These are scientifically more defensible than the earlier behaviorist's "potentially observable" entities (e g, implicit movements)   There remains, however, an acceptance of "observables" as somehow having independent status   Yet many of the behaviorist's problems lie right here   What antecedent "observable" shall be measured, and how?   What consequent "observable" shall be measured, and how?   "Hypothetical entities" cannot be excluded from the "observables"   if the behaviorist chooses to make his measurements in different ways his results will differ   His systematic preferences enter into both "observables" and "intervening variables", apart from the conveniences of ordinary language, he is not coerced by "what is so" more in one case than in the other

The use of the conditioned reflex is very different from Watson's   The conditioned reflex is relegated to a special case of the application of a more general principle of learning reinforcement   Reinforcement is ingeniously made to depend on need reduction in the case of both punishment and reward   It remains true, however, that a simple learning situation is the foundation-stone of the system   Hull explores this situation much more carefully than Watson explored the conditioned reflex, but programmatically the two approaches remain very similar   Because of these basic similarities it does not appear to be unfair to classify Hull's system as a contemporary development of Watsonian behaviorism

The level of treatment in this book has been greatly modified from that in the earlier *Mathematico-Deductive Theory of Rote Learning*   Commonly referred to by him during its preparation as his "primer," it is Hull's attempt to give here in as clear a form as possible the basic structure of his behavioral system   It is designed for the intelligent social scientist not familiar with psychological journals   The exposition in the text is straightforward, using ordinary nonmathematical language, with mathematical derivations included in the notes appended to the chapters   While the exposition is thus self-contained, and can be read without reference books, it is not easy   This is a serious work, and can be mastered only by study.

While no promises are made that further volumes will be published, it is evident that the foundation laid in this book is intended to be built upon by the author or others until it or related systems are made to serve all the social sciences.

It is hoped that as the years go by, systematic treatises on the different aspects of the behavior sciences will appear   One of the first of these would naturally present a general theory of individual behavior, another, a general theory of social behavior   In the elaboration of various subdivisions and combinations of these volumes there would develop a

systematic series of theoretical works dealing with different specialized aspects of mammalian behavior, particularly the behavior of human organisms Such a development would include volumes devoted to the theory of skills and their acquisition, of communicational symbolism or language (semantics), of the use of symbolism in individual problem solution involving thought and reasoning, of social or ritualistic symbolism, of economic values and valuation, of moral values and valuation, of familial behavior, of individual adaptive efficiency (intelligence), of the formal educative process, of psychogenic disorders, of social control and delinquency, of character and personality, of culture and acculturation, of magic and religious practices, of custom, law, and jurisprudence, of politics and government, and of many other specialized behavior fields (p 399)

With this vista before him, Hull begins in this book to show what he means by a theoretical system of behavior, and he presents conscientiously a model of systematic theory closely tied in with quantitative data After preliminary chapters on the nature of scientific theory and of objective behavior theory, successive chapters take up the general problems of stimulus reception, action and its coordination, need, primary and secondary reinforcement, habit strength, inhibition, behavioral oscillation, response evocation There are 20 chapters in all, including a summary chapter which recapitulates the major conclusions and ends with a forward glance

The basic plan of a chapter is to define a problem, to exhibit the known phenomena bearing on the problem, to order these into an empirical law (usually by fitting a curve to the data) and then to proceed to point out the systematic implications of these findings Where the new relationships are of basic systematic importance, they are formulated into postulates, of which a total of 16 are stated Presumably all the data within the book (and, of course, many others) can be derived through logical manipulation of these 16 basic principles

The advance which Hull has made over Watson is well illustrated in the summary diagram, showing the conditions, events, and constructs necessary to compute the behavioral outcome at a given moment This modern S-R diagram (p 383) has six major segments to the chain between stimulus and measured amplitude of response (reinforcement, generalization, motivation, inhibition, oscillation, response evocation) and the diagram includes 13 symbolic constructs and 12 objectively observable conditions and events The quantitative portion of the system consists in the equations relating antecedents to consequents throughout the systematically related chain of events, so that the behavioral outcome of a given set of observable conditions can be calculated

It must be said that Hull has succeeded exceedingly well in presenting another systematic behavioral model His contributions in this respect have been matched by no other psychologist

The kinds of "observables" he is forced to choose for this demonstration are, however, extremely limited lever-pressing by rats, galvanometer deflections, some nonsense-syllable learning Thus his success may rest upon the "observables" he chooses To argue that he chooses these because they are "simple"' is to deny, in part, the "molar" principle he accepts

The facts of nature do not force psychologists to adopt the substance of this particular scientific model It is only fair to say, however, that, until other models as carefully worked out are presented, Hull's contribution must stand as a serious challenge to all who are dissatisfied with it It is not to be answered by argumentation alone

The primary objective of scientific theory   is the establishment of scientific principles Whereas argumentation is socially aggressive and is directed at some other person, natural science theory is aggressive towards the problems of nature, and it uses logic as a tool primarily for mediating to the scientist himself a more perfect understanding of natural processes (p 8)

No psychologist interested in systematic theory can afford to overlook this book Although there may be dissatisfaction over content or details, as an example of explicit objective system construction it stands unrivalled

ERNEST R HILGARD

Office of Civilian Requirements,
War Production Board,
(on leave, Stanford University)

PHYSIOLOGICAL PSYCHOLOGY By Clifford T Morgan New York and London·
McGraw-Hill, 1943 Pp xii+623 $4 00

To those psychologists who anticipate an eventual systematization of the field of physiological psychology with respect to both the psychophysical and the adjustive aspects of behavior, Morgan's *Physiological Psychology* is an important contribution In this book, an attempt has been made to provide a review of the main facts concerning the differential physiological correlates of sensory capacity, genetic development, motor adjustment, motivation, periodic activity learning, and symbolic functions

Twenty-six chapters in the book are divided into a critical analysis of recent information concerning the physiology and anatomy of the living system, ontogeny and phylogeny of the vertebrate body and vertebrate behavior, the physiological basis of sensory processes, the anatomical pathways involved in reflex activities, the neural centers of emotional behavior, periodic activity, and basic drive states, and the relation of learning to the central nervous system The selection of material for these general topics has been determined in the main by available experimental information which will clarify the problems concerned

This book is intended as a textbook for undergraduates and as a reference text for advanced students Teachers of advanced undergraduate students will find the book especially valuable for its analysis of new approaches to many central problems of physiological psychology Properly speaking, the book deals with the comparative physiological psychology of mammals Experimental observations on infrahuman forms are utilized as a framework for discussion of general problems of significance in understanding human behavior In the main, the neuroanatomical point of view is emphasized in both the organization and content of the book

The author has achieved a very successful balance between introductory explanation and analysis of recent experimental information, as demanded by a textbook covering the facts and principles of physiological psychology With the exhaustive information provided by this book, it should be possible for the most part to dispense with handbook sources in the teaching of the first course in the field The treatment of the topics of sensory function, motivation, and learning are especially valuable in this connection The writer has made a definite contribution in bringing together recent material on vision, hearing, and the chemical senses Students will be able to gain a broader view of the problems of motivation from this book than from any other source known to the reviewer

The first five chapters constitute an introduction dealing with the historical backgrounds of physiological psychology, the general methods used in the field, and the anatomical and physiological systems involved in general forms of behavior One may regret that greater emphasis was not given in these introductory chapters to methodology and meaning of experimental procedure The section on the phylogenetic and ontogenetic development of conduct is of significance especially for the review provided of new advances in knowledge of the physiological factors involved in behavioral development Many will question, however, the authori-

tative points of view concerning behavioral maturation, which the author has chosen as best indicating theoretical solution of this problem Recent outstanding contributions to knowledge of sensory function are ably covered in the next section of the book in relation to long-standing theoretical problems in this field Special prominence is given to the contributions of Crozier, Hecht, and Wald to visual theory, to the observations of Bartley on retinal functions, to the work of Pfaffman on taste sensitivity, to the studies of Neff and Galombos on hearing, and to the important work of de Barenne and Ruch on cutaneous and proprioceptive functions A significant theoretical evaluation of the physiological bases of sensory discrimination is given as summary discussion of the section on the senses

Although the chapters on motor activities are well organized and contain numerous important experimental facts, they would benefit by increased emphasis on problems of the dynamics of muscular activity, temporal analysis and patterning of movements, and temporal functions involved in motor coordination   The subjects of emotion, periodicity in behavior, and basic drive states are treated as they should be in terms of interrelated topics in behavior motivation   The concluding chapters constitute a conservative factual and theoretical treatment of conditioned response, discriminative, verbal, and orientation learning

Some criticisms of the book should be noted relative to its potential use in teaching   Because the author has limited himself to topics on which relatively extensive physiological information is available, questions of fatigue, perception, reaction, reaction time, and inhibition appear to have been left out of consideration It may be that the abruptness with which new concepts are introduced and the cursory treatment of methodology will cause considerable trouble for teachers not fully acquainted with source material   However, these weaknesses in the book, which are to be expected of almost any similar presentation of this difficult field, are unimportant features in comparison with its outstanding favorable qualities By writing a textbook that combines the important elements of past experience in experimental physiological psychology with important modern contributions, Dr Morgan has performed a task for which teachers and students alike will be greatly indebted

<div align="right">KARL U SMITH</div>

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BALLOTS AND THE DEMOCRATIC CLASS STRUGGLE   By Dewey Anderson and P E Davidson Stanford University, Calif Stanford University Press, 1943

This book "offers political scientists, students in courses of citizenship, and professional politicians who would know what prompts persons to register and vote as they do certain well-checked information concerning voting conduct" It is, in fact, a monograph containing valuable original data on the *economic* determinants of political behavior in a California county in 1932 and 1934

By means of an intensive analysis of the affidavits filed when citizens registered for voting, the authors demonstrate a close relationship between occupation and expressed political preference   Using "percentage Republican" as an index of conservatism, an index which seems to become more valid year by year, the authors show that conservative tendencies follow economic lines public officials, professionals, merchants and farmers voted predominantly Republican, unskilled, semi-skilled, skilled, and clerical workers led the Democratic list   This, it may be said, is proving the obvious; unfortunately, that is sometimes necessary   Further value is

added to the data by breakdowns showing the relative importance of sex, property ownership, and similar variables The argument is presented that those who have amassed a substantial economic stake in the community will behave differently from those who have not been so well-treated by the system This, however, is as far as the authors go with the Marxists—they immediately point out the role of irrational, traditional, and emotional influences on political preference This section is rather weak, although some knowledge of the psychological literature—e g , on stereotypes—is indicated

As regards the data, a weakness occurs in the presentation and interpretation of facts relative to actual votes cast, in contrast to stated preference in registration It is fairly well known that in a Republican community (like the one studied) registrations will show an excess of Republican registration over voting, and workers whose employers are strongly Republican in sympathy are likely to register Republican even when they have no intention of casting such a vote The authors attempted to make a postcard survey of actual voting, but the results were admittedly unsatisfactory

The focus of the book is a chapter on "Realism in education for citizenship" which is surprisingly good The twelve-point program of the NEA Educational Policies Commission *(Learning the Ways of Democracy)* is quoted in condensed form This program comes in for some good-natured joking because of its failure to come to grips with reality Anderson and Davidson then proceed to elaborate the twelve-point program by tying it to concrete considerations of unequal opportunity (economic and educational), corrupt political machines, pressure groups dominating education, and similar potent questions On the whole, they do an excellent job The keynote is a happy medium between cynical acceptance of present conditions and idealistic denial of political realities The authors hope that a democracy of *enlightened* pressure groups may be able to withstand tendencies toward reaction.

To me the educational suggestions seem decidedly inadequate unless they are coupled on the one side with sweeping economic reforms to give youth the educational opportunities envisaged, and on the other side with extensive psychological work aiming to free more people from the emotional complexes which block the free application of intelligence Perhaps this criticism stamps me as Utopian The program proposed is certainly desirable, but I can only feel that it would, if standing alone, almost certainly be suppressed before it got fairly under way

The book suffers from an overelaboration of detail in the data, a shrinkage of 25 per cent should have been easy This will undoubtedly prevent school teachers and others who should read it from doing so It will find its best use as accessory reading for students in social psychology, education, and political science

Ross Stagner

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LEADERSHIP AND ISOLATION· A STUDY OF PERSONALITY IN INTER-PERSONAL RELATIONS
By Helen Hall Jennings New York· Longmans, 1943 Pp xv+240.

In broadest scope, this book is a first attempt to reveal the interpersonal determinants of those affectional choices and rejections which sociometry poses as the basis of all primary groups Jennings' analysis of the "choice-process" focuses upon the problems of leadership and isolation, analyzing these extreme differences in "choice-status" as expressed among a group of adolescent girls Leaders are, by definition, the "over-chosen," and correlatively the problem of leadership is viewed

as the answer to the question How does the leader manage to attract to herself positive choices from her followers?

Like the earlier sociometric studies with Moreno, this study draws its subjects from the New York Training School for Girls The primary data for analysis are two sets of expressions of choice secured at an eight-month interval from 133 girls whose living arrangements in the institution during that period remained unchanged

Innovations in procedure which bear significantly upon the nature of Jennings' findings can be itemized (1) The subjects were permitted to express an unlimited number of choices and rejections of associates on each of four criteria "living with," "working with," "studying with," and "spending leisure with" The range of choices or the number of different individuals chosen is represented as a measure of the subject's "emotional expansiveness" (2) The "choice-status" of the subject is measured in terms of the number of choices and rejections directed upon her by associates (3) By appending to the sociometric rating an inquiry into the number of different individuals with whom the subject had spontaneously initiated social contact, an index of "social expansiveness" was secured (4) The correlates of "choice-status" are pursued through an inventory of typical behaviors of under-chosen, averagely chosen, and over-chosen individuals as reported by their temporary guardians, the housemothers Finally, the personality data include a study of the reputation of leaders and isolates among their peers, together with summary personality sketches of these contrasting types by the author

Of the many affectional interrelationships turned up in the intensive statistical analyses which overflow 17 tables and an appendix, only a few can be mentioned here Interesting as a side-light on group structure is the finding that disaffection between members is expressed only half as frequently as positive choice More directly relevant to the central problem—the determinants of the choice process— is the discovery that the individual's own emotional expansiveness toward others (the number whom she chooses) is unrelated to the degree of their emotional expansiveness towards her, or to her choice status in the community Leaders, isolates, and averagely chosen individuals differ slightly in the tendency to initiate social contacts (social expansiveness), but show no significant differences in emotional expansiveness Jennings concludes that the individual's emotional expansiveness is determined primarily by the needs of her personality—with little realistic appraisal of possible gratification in the situation—and is a fairly stable characteristic What, then, determines the receipt of choice? Evidently it is not the individual's own readiness to bestow choice Jennings' conclusion is that choice-status is directly related to the role which the individual plays in interpersonal situations The leader is perceived by her superiors, her associates, and the experimenter as contributing more than the average member to group situations—e g , in initiating activity, demanding fair play, advising, protecting the isolated, etc In short, the leader is "group-oriented" while the isolate, and to a lesser degree the averagely chosen, is "self-bound "

Jennings makes fleeting reference to differences in styles of leadership which appeared to be related to personality characteristics of the leaders in question and types of appeals exercised upon followings Leaders evidently differed in personality traits But, surprisingly, the traits of leaders and isolates showed considerable overlap—the effective differences lying in the manner in which these traits were expressed in interpersonal situations For example, the leaders as a group were unquestionably aggressive, quick to criticize, retaliate, etc , yet it was the isolates whom housemothers stigmatized as "aggressive and dominant "

As an analysis of the choice process, Jennings' study rescues sociometry from a miasma of undefinable, elective affinities Its contributions in this respect can receive no more generous an evaluation than is presented by Professor Gardner Murphy in his *Foreword* to the book As an analysis of leadership this study is at once reassuring and disappointing Generalizations about leaders as "group-oriented" as contrasted with "self-bound" individuals are familiar—hence reassuring What is disappointing is the confusion in interpretation which seems to stem from inadequate conceptualization of two theories of leadership, a role theory and a trait theory The data as presented wear now the one aspect, now the other, with neither clearly defined

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CHILD DEVELOPMENT PHYSICAL AND PSYCHOLOGICAL GROWTH THROUGH THE SCHOOL YEARS By Marian E Breckenridge and E Lee Vincent Philadelphia and London W B Saunders, 1943 Pp x + 592

As is implied by the title, this book differs from the usual textbook on child psychology in its emphasis on the anatomical and physiological aspects of growth Nevertheless, the authors are careful to indicate the interrelatedness of all developmental processes Even in those chapters that have to do primarily with the results of physical measurements some space is devoted to a consideration of the special problems of adjustment with which the child who deviates markedly from the norms in respect to bodily size is likely to be faced

The authors apparently accept Olson's concept of organismic age rather uncritically and are not troubled by any theoretical questions as to the legitimacy of deriving an arithmetical mean from such diverse functions as height, strength of grip, reading ability, and intelligence They likewise disregard the statistical problems arising from the use of age norms obtained from different groups whose comparability with each other is unknown, or from the assignment of equal weights to instruments of widely differing reliability Fortunately, after their laudatory discussion of this procedure on page 35 and following, little further reference to it is made Their discussions of the relations of physical and mental growth are based largely upon their own rich experience with children as well as a careful searching of the experimental literature

The fifteen chapters of the book are devoted to the following general topics presented in the order named (1) general principles of development (two chapters), (2) physical and social influences upon growth (four chapters), (3) specialized aspects of growth, including a single chapter on each of the following physical growth, motor control, sense perception, memory and imagination (including creative activity), language and thought, and three chapters on personal-social development The final chapter presents a general summary of growth principles and their implications for education, together with two illustrative case studies

Throughout, the book gives evidence of painstaking effort in its preparation Most of the 806 titles in the bibliography have been mentioned at least briefly in the text This continual reference to the experimental literature has obvious advantages, not the least of which is the feeling thereby given to the student that our knowledge of child development is not derived from arm-chair theorizing or personal reminiscence, but from carefully controlled observation and experiment The major hazard in this form of presentation, particularly in a book addressed mainly to students with little scientific training, is that insight may be sacrificed to

a plethora of facts I do not think the authors of the present volume have entirely avoided this dilemma, in spite of their emphasis upon the relational aspects' of development There are many sections in which the reader has the feeling of a weary pedestrian whose only view of the dense forest he is traversing is that of countless trees

The book is illustrated by line drawings, pictographs, and photographs However, the usefulness of these is frequently impaired by inadequate descriptions An example is Figure 28 on page 259 which consists of a series of photographs showing the posture of the same girl at successive ages Nowhere is there any indication whether these photographs are presented as examples of good, poor, or average posture, whether the student is expected to draw conclusions as to the persistence of postural habits in an individual child between the ages of four and fifteen years, or whether, on the contrary, the photographs are intended to depict the postural changes that occur with age To the writer, they suggest a mild degree of lordosis that is more apparent at certain ages than at others, but this may be largely a result of the angle at which the photographs were taken

As a source book for the undergraduate student, or for supplementary reading, the book has definite merit The chapter on nutrition is particularly to be recommended as filling a needed gap in the informational content of the typical undergraduate course in child psychology, where the repercussion of physiological factors upon child behavior is so frequently disregarded The list of questions and suggestions for directed observation of children in school and at play that follow each chapter provide many useful ideas for enlarging and vitalizing a course of instruction

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GERIATRIC MEDICINE Edited by Edward J Stieglitz Philadelphia Saunders, 1943 Pp xix+887

Workers in the fields of applied, clinical, physiological, experimental, and genetic psychology will find this book both instructive and provocative Almost every experiment in psychology can be repeated with an age reference, and the problems of aging and the aged are becoming increasingly important as our population grows older, and as we come to depend more and more upon workers advanced in life

Although most of the book is devoted to the pathology of the various organs and body systems during the senescent period, and although it is written primarily from the standpoint of the medical practitioner, nevertheless it contains a good deal of material of psychological interest

Edited by Edward J Stieglitz, Consultant in Gerontology to the National Institute of Health, the volume is the work of fifty-four contributors *Geriatric Medicine* is a clinical companion to Cowdry's definitive work, *Problems of Ageing,* and there is some overlap in the subject matter and authorship of the two volumes

Geriatric Medicine contains forty-six chapters, of which the following are of particular interest to psychologists Chapter 1, "Orientation" (Edward J Stieglitz), Chapter 2, "Principles of Geriatrics" (Edward J Stieglitz), Chapter 3, "Principal Physiologic Changes with Normal Aging" (Anton J Carlson), Chapter 5, "Principal Mental Changes with Normal Aging" (Walter R and Catharine C Miles), Chapter 10, "Medicolegal Aspects of Senility" (A Warren Stearns), Chapter 17, "Mental Diseases" (Winfred Overholser), Chapter 18, "Organic Diseases of the

Brain, Spinal Cord, and Peripheral Nerves" (Carl D Camp), Chapter 19, "Disorders of Vision Diseases of the Eye" (Benjamin Rones), Chapter 20, "Disorders of Hearing Diseases of the Ear" (James A Babbitt)

The first two chapters by Stieglitz are the most thought-provoking in the entire book In these challenging chapters Stieglitz outlines the problems of gerontology, both mental and physical, and indicates work yet to be done He is concerned not only with chemical theories of aging, industrial health, and medical matters but with such topics as education of the aged, the socio-economics of an aging population, and leisure in senescence Stieglitz is fully cognizant of the existence of individual differences, the existence of which is not so well recognized by some of the other contributors

Stieglitz defines gerontology as "the science of aging in its broadest sense The aged and aging are not the same, the aged are people, aging is a process Whereas pediatrics is concerned with the early stages of the life span, geriatrics is that branch of medical science concerned with the physiologic and pathologic problems of older individuals Geriatrics is thus but a part, a subdivision, of the broader field of gerontology" (p 1)

"The most puzzling dilemma of clinical geriatrics," says Stieglitz, "is the problem of distinguishing disease changes from those of 'normal' senescence" (p 11) This problem confronts all psychologists who study the fate of mental functions in later life

It is Stieglitz's opinion that geriatrics should begin at approximately forty, since involutional changes do not become clearly marked until this period This attempt to delimit geriatrics from other medical subsciences concerned with earlier life stages is artificial and arbitrary As Stieglitz himself points out, aging is a continuous process, and it is more fruitful to prevent age symptoms from appearing (if possible) than to attempt to treat them after they are clearly evident Geriatric medicine may have to lower its sights far below forty, may even have to concern itself with the prenatal period

Carlson, in his chapter on physiological aspects of aging, emphasizes the clock-like regularity with which certain changes appear, even in persons of different heredity who live in unlike environments He discusses changes in the digestive, cardiovascular, excretory, neuro-skeletal, lymphatic, endocrine, and other body systems Carlson concludes that aging is a "gradual depletion of the hereditary tissue reserves or 'factors of safety,' so that the aging individual becomes gradually less able to meet the usual accidents and the unusual stresses of living" (p 71)

Walter R and Catharine C Miles devote eighteen pages to a consideration of the principal mental changes that occur with normal aging They point out that changes in appearance and in physical health have psychological implications Among the topics discussed are changes in hearing, vision, motor-vehicle driving, intelligence, learning, interests, personality traits, occupational competence, motivation, productivity, and great achievement It is shown that as persons grow older certain sex differences tend to merge

There is some overlap in the treatment of hearing and vision, since these topics are developed not only by Babbitt and Rones, but by Carlson and Miles and Miles A certain amount of repetition is inevitable in a symposium of this kind, and is excusable, perhaps even desirable

Only fifteen pages are given to Overholser's chapter on mental diseases in later life, and hence the treatment of these conditions is very skimpy. It would seem that this vital subject was deserving of more attention than it received Stearns

has a very interesting chapter on the medicolegal aspects of senility, and he gives some consideration to mental disease and criminality in the aged

The book is attractively printed and put together, and contains a large number of tables and illustrations It is required reading for those who must work with older persons, either in the laboratory or on the assembly line

<div align="right">Oscar J Kaplan</div>

University of Idaho, Southern Branch

FIRST COURSE IN PSYCHOLOGY   By Robert S Woodworth and Mary R Sheehan   New York Henry Holt, 1944   Pp x+445   Price $1 80

Woodworth and Sheehan's *First Course in Psychology* answers the prayer of the many who have long wished to see the scientific findings of psychology placed at the disposal of high-school students who may never see the inside of a college This is a real textbook in general psychology, not a fragmentary offering in personality, guidance, or how to study It contains the fields familiar to every college student who has finished the introductory course The content has been simplified and adapted to the average mid-teen-age student's acquaintance with life It is not a hand-me-down, not an abridged college test, it has been organized and written for the pre-college age The illustrations have been chosen for their youthful appeal, *e g ,* spectators at a game are obviously high-school students The reader sees himself in the numerous verbal pictures He is definitely the protagonist in the series of psychological situations

Immediately upon reading the first chapter, the student feels himself become a little psychologist He is presented with the case histories of General MacArthur and Adolph Hitler, both of whom he takes to pieces, analyzes into parts and puts together once more into the men he reads about every day His critical understanding is focused on personalities in current history He sees social value in psychology, the vista unlocks the door to enormous possibilities in the fields of social and individual behavior A hero and a villain are on the stage and the reader is the audience This is the first dramatic step in helping the young psychologist to understand people

One may be disappointed if he wishes to continue this search for the answers to human nature without interruption The authors apparently felt the necessity of losing no time in guiding the student in how to study and profit most from the rest of the course Chapters on learning, memory and reading follow, preceding the more colorful material on motivation, personality, individual differences, etc This content on educational psychology is important, but it might be reduced in quantity or be placed elsewhere to sustain the initial interest aroused by the two case studies

The applications of psychology to current events and the changes in emphases due to war conditions are recognized One finds discussions of morale, camouflage, war rumors, race differences, pictures of soldiers, planes, women in war industries The psychological demands of the present atypical times are appropriately treated, but the book is directed to the times in a broader sense than the war period only

The authors never forgot to personalize their suggestions Throughout the book, they speak to "you" in a homey, monosyllabic language "When you cram, you must either study longer than if you had planned your work differently, or you must do the work less thoroughly   When you cram, you are not getting your time's worth " They know the high-school student is concerned with popu-

larity, becoming clothes, self-confidence, sex attraction, family relations, and religion, and they cite illustrations to support their sound social advice.

Family relationships "The girl who does not keep her own room in order should not be surprised when the family ignores her suggestions for improving the rest of the house"
Boy-and-girl friendships "'Petting' is not the solution to the problem, it makes the conflict greater A better answer is group activity—the boy and girl doing together the many interesting things young people can find to do"
Religion "Religion can   supply a purpose in life .   A person who intelligently lives according to the principles of some religion usually finds it possible to decide what is the right course to follow when he is faced with a serious life problem"

Carefully and systematically, the authors have omitted detailed experiments and names of psychologists One recognizes the work of Pavlov, Hartshorne and May, Cason, Bernreuter, etc, but the only names he meets are Binet and Freud and they are casually introduced Physiology is hinted at but function is highlighted Technical terms are reduced to a minimum and then italicized for emphasis The glossary offers definitions to one who seeks them At the end of each chapter appears a summary, and each time the reader's memory is jogged with "In the following summary pay especial attention to the italicized words Be sure that you have made them a part of your working vocabulary   " Exercises are provided for class discussion and simple experimentation

A sense of fairness permeates Woodworth and Sheehan's discussions Controversial material such as extra-sensory perception and the interpretation of dreams is adroitly and impartially handled Also, one feels that the authors have been sensitively aware of the adolescent's immaturity, his impressionableness, his idealism, that they seek to inform him without confusing him, to make him analytical without encouraging morbid introspection, to further his wholesome ideals Since the results of scientific psychology have been interpreted for the pre-college student, this reviewer fervently hopes that high schools will recognize its value and include psychology among its courses

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NEW BOOKS RECEIVED

ACKERMAN, LLOYD *Health and hygiene* Lancaster, Pa Jaques Cattell Press, 1943 Pp xii+895 Price $5 00

BAKER, HARRY J *Introduction to exceptional children* New York Macmillan, 1944 Pp xiv+496 Price $3 50

BECK, SAMUEL J *Rorschach's test I Basic processes* New York Grune & Stratton, 1944 Pp xiii+223 Price $3 50

BENNE, KENNETH D *A conception of authority* New York Bureau of Publications, Teachers College, Columbia University, 1943 Pp v+227 Price $2 65

BOWLEY, AGATHA H *Guiding the normal child* New York Philosophical Library, 1943 Pp xv+174 Price $3 00

CANTRIL, HADLEY *Gauging public opinion* Princeton, N J Princeton University Press, 1944 Pp xiv+318 Price $3 75

CARR-SAUNDERS, A M, MANNHEIM, H, & RHODES, E C *Young offenders* New York Macmillan, 1944 Pp x+168 Price $1 75

COLE, LUELLA *Attaining maturity* New York Farrar & Rinehart, 1944 Pp x+212 Price $2 00

HUNT, J McV (Ed) *Personality and the behavior disorders* Vols I and II New York Ronald Press, 1944 Pp xii+1242 Price $10

KASANIN, J S *Language and thought in schizophrenia* Berkeley, Calif University of California Press, 1944 Pp xiv+133 Price $2 00

MOORE, UNDERHILL, & CALLAHAN, CHARLES C *Law and learning theory A study in legal control* New Haven The Yale Law Journal, 127 Wall St, 1943 Pp vi+136

SALTER, ANDREW *What is hypnosis?* New York Richard R Smith, 120 East 39th St, 1944 Pp vi+88 Price $2 00

SARGENT, S STANSFELD *The basic teachings of the great psychologists* New York Garden City Publishing Co, 14 West 49th St, 1944 Pp xiv+346 Price 69¢

TALIAFERRO, WILLIAM H *Medicine and the war* Chicago University of Chicago Press, 1944 Pp vii+193 Price $2 00

WOLFF, WERNER *The expression of personality* New York Harper, 1943 Pp xiv+334

WOODWORTH, ROBERT S, & SHEEHAN, MARY R *First course in psychology* New York Henry Holt, 1944 Pp x+445 Price $1 80

The Journal of Abnormal

and

Social Psychology

VOCABULARY AND MENTAL DETERIORATION IN SENILE DEMENTIA

BY SYLVIA B ACKELSBERG *

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THIS investigation reports a study of the relationship of various kinds of vocabulary function in mental deterioration which occurs in senile dementia   As a corollary of this we were interested in determining whether or not a given set of tests devised by Dr Capps offers a valid and/or reliable index of deterioration

The problem of mental deterioration has presented a challenge to psychology and psychiatry for a number of years

There is need for more thorough descriptive accounts of the nature and extent of changes in mental functioning as well as a more accurate knowledge of whether or not any types of mental functioning remain unaffected by deterioration   Further research of this nature under carefully controlled conditions may eventually lead to more precise techniques of diagnosis, methods of forestalling further deterioration, a means of proper institutional classification, and measures for determining the effects of various kinds of therapy or reeducation (4, p 1)

Capps (4) investigated the relationship of various kinds of vocabulary function to clinically estimated degrees of mental deterioration in "idiopathic" epilepsy   He used a group of seven different types of vocabulary tests and the nonvocabulary Babcock test of mental efficiency   His results show that there is a reliable, consistent, and progressive reduction in the mean scores of all of the tests associated with the groups of subjects which had the greater amount of mental deterioration   Each of the tests included in the study was found to have a significantly high correlation with the clinically estimated degrees of mental deterioration, although some tests were more closely related to deterioration than others   Capps believed his results to have theoretical significance and that they contributed to a further clarification and understanding of the nature of mental deterioration

Other investigations during the past 30 years have shown that there is a very great loss of mental efficiency among senile dementia

.patients Yerkes (14) found that officers between the ages of 60 and 70 averaged about 18 months of mental age below those aged 20 to 25. Willoughby (13) reported that the parents of his sample of 110 children showed a decline to a "pubertal or pre-pubertal level" of mental age at age 60 Jones and Conrad (7) placed the peak of mental age at 18 to 21 and found a gradual decline to 168 months at age 55 Weisenberg, Roe, and McBride (11) found low negative correlations between test scores and age in their sample of adults Wechsler (10), in standardizing the Bellevue test in 1939, found that the mental age declined about 12 months for every 10 years

Previous studies have shown that old age is accompanied by deterioration Just what form of deterioration is involved and how it is manifested has not been established

STATEMENT OF THE PROBLEM

The purpose of the present investigation was to obtain the following information

1. What is the relationship of various kinds of vocabulary functioning to mental deterioration shown by psychiatric patients diagnosed as senile dementia?

2 Do the tests devised by Capps offer a valid and/or reliable index of deterioration in senile dementia?

3 Can any conclusions be drawn concerning the similarity of deterioration in senile dementia and the other psychoses?

SUBJECTS

The subjects used in this investigation consisted of 50 patients of the senile dementia type, all residents of the Fairfield State Hospital, Newtown, Connecticut All subjects were selected on the basis of the following factors·

1 *Intelligence* Little or no attempt was made to classify either the intelligence or the degree of deterioration of senile patients upon admittance to the hospital It was, therefore, found impractical to attempt to select subjects on the basis of intelligence scores It was possible by studying the case history of a patient to determine the mental level of the patient with some degree of certainty Such factors as background, previous life, schooling, and earning capacity were taken into consideration Subjects were selected from the group whose life history indicated that they had had average intelli-

gence   Those for whom there was suggestive evidence of having
been of low-grade intellect or of superior intelligence were not
included in this study   This basis of selection was adopted in order
to avoid too wide a range of earlier intelligence, and so to rule out
the possible effects of extremes of intelligence on deterioration

2 *Education*   It would have been desirable to limit the range
of educational background in the selection of patients, but this was
practically impossible, since there was not adequate information on
this point in the hospital records   The patients themselves, when
questioned as to how long they went to school and up to what
grade, usually would answer: "For a long time," or " 'Til I had
to go to work," etc

3 *Reading Ability*   Since it was not feasible to select subjects
on an educational basis, the criterion of literacy was established (the
subject had to be able to read and write)   Again obstacles pre-
sented themselves   The investigator planned to use the reading test
at year X of the Binet test, but many of the patients could not see
to read, as glasses were not provided by the hospital   The criterion
of reading ability then had to be satisfied by simple questioning
If a patient answered "Yes, I can read but my eyes are bad and I
don't see so well, etc," he was accepted as filling the criterion

4 *Age and Sex*   The group of patients chosen for study, those
suffering from senile dementia, limits itself as to age range   The
subjects employed in this study range in age from 60 to 85   Sub-
jects of both sexes were used in this investigation, an equal number
of each

An attempt was also made to control other factors which might
influence the results   This was a very difficult task, however, with
the seniles, for old age is so often accompanied by visual, auditory,
and motor disturbances, and these might easily affect the test results.
Patients suffering from severe disturbances of the above-named types
were omitted from the study   Patients who were too badly
deteriorated or too greatly disturbed to cooperate and to compre-
hend the directions were not used   The investigator, herself, classi-
fied each patient studied as showing *(a)* little deterioration, *(b)* mild
deterioration, and *(c)* marked deterioration   This classification she
made on the basis of general behavior and not on the basis of the
tests employed

Techniques and Methods

Five different kinds of vocabulary tests were used in this study They were five of the tests used by Capps in his study of deterioration in epileptics, and according to Capps "each of these tests was thought to involve not only a knowledge and use of words but a somewhat different aspect of mental functions " (4)

Capps advised that the synonym, antonym, and categorization tests be administered to small groups of from three to seven subjects "to prevent the subjects from feeling that they were being examined for any personal or individual reason " In working with the seniles, however, this procedure was not feasible. First of all, the subjects acted as distractions for each other, and, secondly, each subject needed so much individual attention that it was impossible to work with even two at one time As far as the feelings of the patients were concerned, there was no obstacle They were only too pleased to be led off from the rest and given some individual attention All five tests were administered orally since most of the patients could not see well enough to read The examiner read the questions while the patient had a copy of the test before him

The tests used were given in the following order:

1. A synonym and

2 An antonym test were used These tests were found valuable in determining the subject's ability to see relationships between words and to differentiate between similarities and differences For each of these tests there was a four-minute time limit

3 A categorization test was used to ascertain whether or not the subject could classify several "species" words which were related to a common "genus" word A four-minute time limit was used in this test

4 The word naming test was also used In order to estimate the number of words which could be named within a given time limit, the subjects were required to name as many words as they could think of in three minutes The purpose of this was to see whether there was a difference in the rate and quantity of the words produced by the use of a free association technique The responses were recorded verbatim

5. A list of 12 homographs, selected from Lorge's (7) Semantic Count, was presented orally The list ranged from most commonly used words to somewhat rare words Each word had a minimum

of five different meanings   The subjects were asked to give as many different meanings as they could for each word within a two-minute time limit   This type of technique was thought to demonstrate the ability of the subjects to accomplish a shift from one mental activity to another on a verbal basis

METHOD OF SCORING TESTS

1 On both the antonym and the synonym tests an item was scored as correct when the exact antonym or the exact synonym was chosen   If partially related words were chosen for any single item, the item was not considered as correct   Each item was given a credit of one point. The total possible number of points on each the antonym and synonym test was 25

2 In the categorization test, each item was scored as correct only when all three of the words which were related to the stimulus word were chosen   Each correct item was given one point credit The total possible number of points was 25

3 The score on the homograph test was first determined by counting all of the different correct meanings which were given for the entire list of 12 words   One point was given each correct word. The total possible number of points is unknown   For analytical purposes, the test was rescored in order to record the number of stimulus words for which at least one correct meaning was given Next, the number of stimulus words for which two correct and completely different meanings were given was listed   Then the number of stimulus words for which three correct and completely different meanings were given was also tabulated   Meanings were scored as different if they indicated what was considered to be a true mental shift

4 In scoring the word naming test, which required the subjects to name as many words as they could think of within a fixed time limit, a record was made of the total number of words named. Each word was counted as one point   There is no way of determining what the total possible number of points would be   Counting and long sentences were not scored.

RESULTS

The mean scores and standard deviations of each of the tests included in this study were computed for the three separate groups

.of subjects, each group representing a different level of mental deterioration These results are presented in Table 1. Critical ratios of the differences in the mean score between each pair of groups were computed for each test Table 2 shows these critical ratios for the possible group comparisons

TABLE 1

MEAN SCORES AND STANDARD DEVIATIONS ON ALL TESTS FOR SUBJECTS IN EACH GROUP AND FOR THE COMBINED TOTAL GROUP

	No	Synonym		Antonym		Categori-zation		Homograph		Word Naming	
		M	σ	M	σ	M	σ	M	σ	M	σ
Least Deterioration	12	15 9	3 3	17 7	5 3	13 4	4 8	21 4	6 0	21 3	15 1
Mild Deterioration	13	8 8	3 9	11 3	3 4	8 2	5 1	17 5	3 5	18 3	16 4
Most Deterioration	25	4 4	3 1	2 6	3 4	2 2	2 7	6 4	5 8	4 3	9 1
Combined Total	50	7 9	5 6	7 8	7 4	6 1	6 0	10 5	14 6	11 2	8 8

TABLE 2

CRITICAL RATIOS OF THE DIFFERENCE BETWEEN THE MEANS OF SUCCESSIVE LEVELS OF DETERIORATION ON ALL TESTS

Groups Compared	Synonym	Antonym	Categorization	Homograph	Word Naming
Least vs Mild Deterioration	4 3	3 1	2 4	1 8	41
Mild vs Most Deterioration	3 1	6 8	3 5	6 9	2 5
Least vs Most Deterioration	9 5	8 4	6.8	6 8	3 2

The results establish the fact that the general level of vocabulary functioning, as measured by the tests employed in this study, shows a positive relationship to the estimated levels of mental deterioration in senile dementia

Reliably high critical ratios were obtained in the comparison of the mean scores of all the three possible pairs of levels of mental deterioration on the synonym and antonym tests The mildly deteriorated group shows a reliably inferior score on the synonym and antonym tests when compared to the least deteriorated group. The synonym, antonym, categorization, and homograph test scores

show a reliable difference between the mildly deteriorated and the most deteriorated group   The most conspicuous difference is found in the reliably higher mean scores of the least deteriorated group as compared with those of the most deteriorated group on all the five tests.   There is a marked tendency for the group of subjects characterized by a greater degree of mental deterioration to show an increasingly lower mean score on all tests   The more deteriorated the patient, the lower his scores on all of the tests included in this study.

What are the general characteristics of each test used in the study and what is the relationship of these tests to mental deterioration? The reliably lower mean scores on the categorization test made by the mildly deteriorated as compared with those made by the most deteriorated group and those of the least deteriorated as compared with those of the most deteriorated group are evidence of a marked loss in the ability of deteriorated subjects to classify words into appropriate categories   From mere observation of the more deteriorated patients it appears that they have difficulty in grasping the general principle underlying the test as a whole, i e , the grouping together of words which are related to the stimulus word

The results of the word naming test show that the mean number of words which could be named within a given time limit is decreased, although not reliably so, with both the mild and the most deteriorated group of patients   There must then be a marked limitation in the quantitative production of words with increased deterioration   Capps (4) pointed out that such results might "indicate a paucity of ideational association as well as a limitation in the ability to express words orally"   These findings are relevant to Bleuler's (2) conception of deterioration as due to a weakening in the associative links   All of the subjects scored very low on the word naming test; the critical ratios between the mildly deteriorated and least deteriorated groups and between the mildly deteriorated and the most deteriorated groups are not significant, only the critical ratio between the least deteriorated and the most deteriorated groups shows a reliable difference between those levels.   Therefore, although the word naming test does indicate a decreasing ability to name words with an increase in deterioration, this test cannot be considered a reliable index of deterioration in senile dementia It is possible, however, that because all of the subjects used in this

study were so badly deteriorated this test had no discriminative value

The reduction in the scores on the synonym and antonym tests with the levels showing increased mental deterioration would seem to indicate a loss in the ability to comprehend the relationships between words and to differentiate between similarities and differences

The homograph test seems to demonstrate that deteriorated patients find difficulty in accomplishing shifts from one type of word meaning to another The least deteriorated group would give, on the average, two meanings for most of the stimulus words while the most deteriorated group could give, on the average, less than one meaning per word On this test, too, most of the patients did poorly The critical ratio between the least deteriorated and the mildly deteriorated groups is not a significant one; the critical ratio between the mildly deteriorated and the most deteriorated groups and between the least deteriorated and the most deteriorated groups is significant This test, too, may have been on too high a level to discriminate reliably between the levels. This test is not a reliable index of deterioration in senile dementia

CONCLUSIONS FROM THE DATA

1. The data obtained from the use of the synonym and antonym tests included in this study show a consistent, progressive, and reliable tendency toward a reduction in the scores associated with the subjects showing the greater degree of mental deterioration as judged by the general behavior of the individual

2 The categorization, word naming, and homograph tests give a differential value among the groups, but this discriminative power is not statistically reliable As shown in Table 2, the critical ratios between the various groups for the synonym and antonym tests are all over 3 0, this ratio being an index of significant difference For the categorization test, the critical ratio between the least and mild deterioration group is 2 4 and, therefore, does not show a significant difference This same test does prove reliable for differentiating between the mild and most deteriorated group and the least and most deteriorated group The homograph test does not differentiate significantly between those least and those mildly deteriorated, the critical ratio being 1 8 The test is reliable between "mild" and

"most" and between "least" and most," the ratios being 6.9 and 6 8 respectively The word naming test gave a critical ratio of 0 41 between the "least" and "mild", 2 5 between "mild" and "most"; 3.2 between "least" and "most " This test then has shown a reliable difference only between the least and most deteriorated

TABLE 3

HOMOGRAPHS

Average Number of Stimulus Words for Which One or More Meanings Were Given

GROUPS OF SUBJECTS	TOTAL NO OF WORDS	NUMBER OF MEANINGS PER WORD									
		1-MEANING		2-MEANINGS		3-MEANINGS		4-MEANINGS		5-MEANINGS	
		M	σ	M	σ	M	σ	M	σ	M	σ
Least Deterioration	12	11 9	3	7 0	3 5	2 7	2 8	5*	48	1	03
Mild Deterioration	12	11 7	1 5	4 8	2 8	5	5				
Most Deterioration	12	6 0	3 0	76	95	04†	98				

* One person gave four meanings for five words
† One person gave three meanings for one word

3 The synonym, antonym, categorization, homograph, and word naming tests are all valid indicators of deterioration Each of these tests shows a consistent and progressive tendency toward a reduction in the scores associated with the subjects showing the greater degree of mental deterioration.

4 The reduction in the mean score on each of the tests with increased deterioration seems to indicate not only an impairment in vocabulary functioning but an impairment in possibly related aspects of mental functions as well

5 An analysis of the homograph test shows that the more deteriorated patients are not capable of giving as many meanings per word as the less deteriorated patients A possible interpretation is that the deteriorated patients are less able to accomplish a mental shift from one type of meaning to another

6 Vocabulary functioning, as measured by the tests in this study, does not remain constant or unchanged in the type of mental

deterioration which is present in senile dementia   Therefore, the native intellectual capacity of the deteriorated patients could not be estimated on the basis of any of the vocabulary tests which were given

DISCUSSION

In the case histories of all of these patients there was a diagnosis of "senile dementia, simple" Although all five tests used in this study are valid tests of deterioration in the group tested, they are not all reliable   The investigator, therefore, suggests that the synonym and antonym tests are a valid and reliable measure of deterioration in senile dementia   On the basis of classification into levels of deterioration as outlined in this study, groups of seniles may be selected who will respond, to some degree, to remedial measures and special attention   Certain other tests which had been given to the patients by the hospital psychologists and psychiatrists seemed to have no discriminative value so far as deterioration was concerned   The mental makeup of all those who had been tested was reported in the hospital record as "normal", orientation for almost all was reported as completely lacking; and in the cases where there was a record of some orientation this did not correlate positively with anything else found. On tests involving school knowledge, general information, insight, and judgment, the hospital records showed that all of the patients did about equally poorly. Again, the investigator wishes to point out that the Capps synonym and antonym tests were valid and reliable tests for the group tested

It was impossible to find any test which had been used which showed unimpaired ability and which could be used as a base from which deterioration could be measured   If, however, further studies on larger groups show that the above named tests are reliable and valid, it will not be necessary to establish any other base from which to measure deterioration. Instead, the Capps synonym and antonym tests may be used to obtain indices of deterioration

Gilbert points out:

There is a general and marked deterioration on all types of efficiency tests but deterioration is greatest on tests involving learning and formation of new associations, facility of perceiving relations, retention and motor ability and least on tests such as the giving of opposites, general information, and simple repetitions (5)

This is corroborated by the results of the present study. It is evidently because of this great deterioration on tests involving

facility of perceiving relations that the categorization test had to be discarded as being unreliable If deterioration in this function is so great for the senile, then it cannot be used as a discriminative measure between groups On the other hand, the antonym test, which involved the giving of opposites, is a valid and reliable test

Deterioration in the senile patient does seem to resemble deterioration in the epileptic—a lowering of the whole intellectual level The very fact that the same tests are valid for both groups seems to point to a similarity in what is being tested; in this case the deterioration involved in simple senile dementia and in "idiopathic" epilepsy The mean scores and variability on all tests for subjects in each group and for the combined total group are somewhat lower for the seniles than for the epileptics, but this difference does not detract from the general similarity of tendency

It has been noted that senile patients failed to recall or to utilize recent experiences even when older ones could be recalled. Psychiatric literature records this retrograde amnesia as common, also, in general paralysis, psychoses with arteriosclerosis, and Korsakoff's syndrome, but such a deficit is not considered characteristic in the "functional disorders" Simmins (9) showed that, of the types of patients in her group, only patients with the senile psychoses, general paralysis, and epilepsy performed below normal on her memory tests when general ability (g) was partialed out Wells and Martin (12), in testing 111 patients on a memory test, found that the average of the senile group fell to the 53rd percentile of the normal group, and the average of the paretics to the 68th percentile, while that of the manic depressives fell only to the 74th percentile and that of the schizophrenics to the 82nd percentile

According to Hunt and Cofer

The deficit shown in the "organic" psychoses, in the aged, and in cases of adult brain injury we should attribute largely to damage to the neural structures underlying these performances Such a deficit may show as reduced modifiability, as inability in performances where many attitudes or tasks must be sustained simultaneously or in performances that involve shifting readily from one attitude to another The deficit in the "functional" psychoses, and particularly in schizophrenia, we conceive as an extinction of standards for performance and of thought skills that have been socially rewarded (6)

Cameron (3) pointed out that it was very significant that his senile group, in spite of devastating memory deficits and hopeless disorientation, in its use of the instruments of communication was definitely superior to his schizophrenics who were well oriented.

"The seniles were much more given to self-criticism in relation to their performance of the task　Many of them expressed uncertainty and dissatisfaction with their results by remarking on their own inadequacy" Cameron points out further that the seniles, to a much greater degree than the schizophrenics, had the social capacity for anticipating or adopting the attitude of the other person

We seem to be dealing with different processes　the schizophrenic for the most part gradually withdraws from the business of life　He has been unsuccessful in maintaining satisfactory relationships　The senile patient, on the other hand, has made satisfactory and adequate adjustments throughout a long life.　The senile's deterioration is not a voluntary withdrawal from life, rather, he is forced, and against his will, to withdraw because of failing machinery

The results obtained from the Capps tests link up senile dementia with "idiopathic" epilepsy and give strength to the idea that the course of deterioration in epilepsy resembles that in senile dementia On the basis of other studies already mentioned and the personal observation of this investigator the following hypothesis is presented　Deterioration in senile dementia follows the same course as deterioration in epilepsy, but the course of deterioration in schizophrenics and in manic-depressives is most probably a different path.

Summary

The general purpose of this investigation was to study the relationship of various kinds of vocabulary functioning to mental deterioration of the type senile dementia, and to determine whether or not a given set of tests, namely, those devised by Capps, offers a valid and reliable index of deterioration.　The subjects used in this study consisted of fifty patients, male and female, of the type senile dementia, simplex, all residents of the Fairfield State Hospital in Newtown, Connecticut　All possible controls of mental capacity, education, age, and background were maintained.　The investigator grouped the patients as least, mild, and most deteriorated.　This method is far from satisfactory, but was the only possible means of differentiation among the group　A group of five different types of vocabulary tests was used　These tests seemed to measure not only a knowledge of word meaning and usage, but also possibly related aspects of mental functioning

The results show that there is a reliable, consistent, and progressive reduction in the mean scores of the synonym and antonym tests associated with the groups of subjects which had the greater amount of mental deterioration

Since the factors of education, background, mental capacity, and age were controlled as well as possible, it is felt that these could not have had any significant influence on the test scores and that, therefore, the impairment was principally, if not entirely, due to mental deterioration

Vocabulary functioning has long been recognized as a close associate of the development of intelligence and general mental functioning, these studies tend to indicate that vocabulary functioning is also closely related to the deterioration of mental functioning.

Not only do each of the separate vocabulary tests show a progressive impairment in the ability to deal with word meanings, but they also reflect an impairment in related aspects of mental functioning.

Previous findings have indicated that the vocabulary test score tends to remain relatively constant and unchanged in deterioration as opposed to nonvocabulary test scores   On the basis of this premise, the "Efficiency Index" has been set up by Babcock (1), which is said to measure accurately the degree of mental deterioration   This study shows, however, that vocabulary functioning does not remain constant, on the contrary, these tests involving vocabulary functioning have served as means of discriminating among deteriorated patients and have given measures of deterioration

The synonym and antonym tests are offered as a reliable and valid measure of mental deterioration in senile dementia   These tests should be of aid in classifying patients

BIBLIOGRAPHY

1 BABCOCK, H   An experiment in the measurement of mental deterioration   *Arch Psychol , N Y.,* 1930, No 117
2 BLEULER, E , & BRILL, A A   *Textbook of psychiatry*   New York Macmillan, 1924
3 CAMERON, N   Reasoning, regression and communication in schizophrenics   *Psychol. Monogr ,* 1938, 50, No 1
4 CAPPS, H M   Vocabulary changes in mental deterioration   *Arch Psychol , N Y ,* 1939, No 242
5 GILBERT, J G   Mental efficiency in senescence   *Arch Psychol , N Y ,* 1935, No 188
6 HUNT, J M , & COFER, C N   Psychological deficit   Chap 32 in *Personality and behavior disorders,* ed by J M Hunt   New York Ronald Press, 1944 •
7 JONES, H E , & CONRAD, H S   The growth and decline of intelligence a study of homogeneous group between ages of 10 and 60   *Genet psychol Monogr ,* 1933, 13, 223–298
8 LORGE, I   The English semantic count   *Teach Coll Rec ,* 1937–38, 39, 65–77
9 SIMMINS, C   Studies in experimental psychiatry IV Deterioration of "G" in psychotic patients   *J ment Sci ,* 1933, 79, 704–734

10 WECHSLER, D   *The measurement of adult intelligence*   Baltimore   Williams & Wilkins, 1939

11 WEISENBERG, T, ROE, A, & McBRIDE, K E   *Adult intelligence*   New York   Commonwealth Fund, 1936

12 WELLS, F L, & MARTIN, H A   A method of memory examination suitable for psychotic cases   *Amer J Psychiat*, 1923, 8, 243–258

13 WILLOUGHBY, R R   Age and intelligence   *J educ Psychol*, 1929, 20, 671–682

14 YERKES, R M   (Ed)   Psychological examining in the U S Army   Washington, D C   National Academy of Sciences, 1921

A FOLLOWUP OF MENTAL DEFECTIVES AFTER EIGHTEEN YEARS

BY GEORGE A MUENCH

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THE concept of feeblemindedness has gradually been undergoing a revision in recent years Until a comparatively short time ago, feeblemindedness had been considered by most people to be incurable and that the best that society could do with such individuals was to institutionalize them in order to prevent them from becoming delinquent and from propagating their kind Feeblemindedness is no longer being looked upon as an incurable entity, however, but rather as a condition which may well be remediable Consequently, this study has been an attempt to investigate whether or not mental and social rehabilitation of mental defectives is possible.

Many studies have attempted to determine the relative constancy of the intelligence quotient of mental defectives by retesting such individuals at various periods after the IQ had been established by previous testing Many other studies have been made in an attempt to ascertain the degree of social adjustment that individuals who had originally been diagnosed as feebleminded had been able to attain in our complex society Few, if any studies, however, have been made combining the concept of the constancy of the IQ and the social adjustment of a group of feebleminded individuals after a period of years It is the purpose of this study, therefore, to attempt to lend more evidence to both of these concepts by testing the intelligence and evaluating the social adjustment of a group of individuals eighteen years after they had originally been diagnosed as mental defectives

THE PROBLEM AND PROCEDURE

In 1925 Mary E. Adams, under the direction of Edgar A Doll, published a thesis entitled *Differential Diagnosis of Borderline Feeblemindedness.* As subjects for her thesis, Miss Adams selected 40 boys from the Opportunity School in Columbus, Ohio, who, at the time of her study, were diagnosed as mental defectives The particular group of boys used in the study were selected because of

their homogeneity—they were between 13 and 14 years of age, of native white parentage, educationally retarded, without physical handicaps, not seriously delinquent, and of inferior mental ability.

The battery of tests Miss Adams utilized as group tests were the Ohio Literacy, the Army Alpha, the Myers Mental Measure, the Stenquist Mechanical Aptitude Series I, the Monroe Silent Reading Test 1, and the Cleveland Survey Test in Arithmetic Among the individual tests used were the Stanford-Binet (1916), the Porteus Maze, the Witmer Formboard, and the Smedley group of anthropometric measurements. In addition to the psychometric examination, each boy was studied with reference to his "recreational interests, companions, habits, disposition, mood, and general makeup"

It was the purpose of the writer in the present study to find as many as possible of these individuals who were still living in Columbus in order to attempt to determine the degree of social adjustment which they had made, their present level of intelligence, and their personal histories since leaving the Opportunity School Consequently, a fairly thorough investigation of the city of Columbus was made, and some data on 18 of the individuals were discovered. However, due to the complexity and motility of a wartime society, it was found possible to give a full battery of tests to only the eight more readily accessible individuals in the group. Of the eight individuals given the full battery of tests, four were originally diagnosed as being definitely feebleminded, and four as borderline. The tests given to these eight individuals in the present investigation were the 1916 and 1937 revisions of the Stanford-Binet, the Army Alpha, the Ohio Literacy, the Stanford Achievement Intermediate Reading Test, the Porteus Maze, and the Vineland Social Maturity Scale.

DISCUSSION AND RESULTS

In presenting the results of this study it seemed feasible to the writer to present, first, the data concerned with the change in IQ by presenting a composite picture of the results obtained from the eight individuals which were given a rather complete psychometric examination, and, secondly, the data concerned with social adjustment of the group as a whole As a preface to this discussion it must be recognized that it is entirely possible that the individuals that were located for this followup represent a selected group.

However, if this be true, it is difficult to ascertain what these selec-tive factors may be in view of the fact that exactly one-half of the individuals located for the followup were considered in the original study as being definitely feebleminded, and the other one-half were considered to be definitely borderline or dull-normal individuals. This does not preclude, however, the possibility that this group was a selected one, although it is not possible at this time to determine what factors are important in this selection

SIGNIFICANCE OF IQ CHANGES

It was evident in the comparison of the results of the eight cases in 1925 and in 1943 that there was a general trend in the direction of positive change toward improvement in most of the tests, both in MA and in the IQ   As a change in MA is to be expected with growth when an individual is under 16 years of age, it is the chang-ing aspect of the IQ which is of primary importance, and conse-quently it seemed advisable to change all the test scores into an IQ

TABLE 1

COMPARISON OF IQ's OBTAINED ON VARIOUS TESTS WITH THE SAME GROUP IN
1925 AND 1943

SUBJECTS	STANFORD BINET			ARMY ALPHA		PORTEUS MAZE		OHIO LITERACY		MONROE AND STANFORD READING †	
	1916 ED		1937 ED								
	1925	1943	1943	1925	1943	1925	1943	1925	1943	1925	1943
Case 1	69	67	71	55	63	72	100	55	44	III	Could not do
Case 2	56	62	67	63	69	71	88	67	59	IV	IV
Case 3	66	77	89	65	66	79	94	65	71	V	V
Case 4	58	81	106	58	71	61	94	59	64	V	IV A
Case 5	61	79	84	73	84	59	100	84	92	III	IV A
Case 6	68	104	115	66	92	82	113	69	108	VI	VIII
Case 7	76	83	98	81	88	85	106	77	110	VIII	VI
Case 8	65	91	107	73	88	82	88	98	108	VI	VI
Mean	64 9	80 3	92 1	66 8	77 6	73 9	97 9	71 8	82 0	V .	V
Difference	15 4		27 2*	10 8		24.0		10 2		None	

* Difference between 1916 Binet given in 1925 and 1937 Binet given in 1943
† In grade levels

which could be comparable to the original Stanford-Binet IQ Consequently, in the tests used for comparison an adult basal age of 16 years has arbitrarily been chosen as the CA used to obtain the IQ, even for those tests in which an IQ is not generally given This is done, of course, in the anticipation of obtaining more adequately comparable scores Table 1 shows graphically the individual changes in the IQ in the various tests for the eight subjects, whose median age at the time of the original testing was 13 years 10 months

In order to ascertain for certain whether or not the changes in the various test scores are true and significant changes, it seemed advisable to submit them to statistical treatment   Because of the limited number of cases, Fisher's t-score was used, a statistical device which is a measure of consistency similar to the "standard deviation of the difference," but useful when the number of cases is below 20 Table 2 indicates the degree of the significance of the difference between the various tests taken by the same group of eight individuals in 1925, and then again in 1943

TABLE 2

SIGNIFICANT DIFFERENCES OBTAINED ON VARIOUS TESTS WITH THE SAME GROUP IN 1925 AND 1943

TEST	DATE OF TESTING	MEAN IQ	RANGE OF IQ SCORES	t	Pt *
Stanford-Binet 1916	1925	64 9	56–76	3 55	< 01
	1943	80 3	62–104		
Porteus Maze	1925	73 9	61–85	5 83	< 01
	1943	97 9	88–113		
Army Alpha	1925	66 8	55–81	4 09	< 01
	1943	77 6	63–92		
Ohio Literacy	1925	71 8	55–98	138	09
	1943	82 0	44–110		
Monroe and Stanford Reading	1925	V	III–VIII	0	> 10†
	1943	V	II–VIII		

* The probability that the difference is not a true difference
† Month differences in grade levels

This table indicates clearly that the differences obtained in the scores of this group on the 1916 Stanford-Binet, the Army Alpha, and the Porteus Maze were true and significant differences This is evident from the fact that the probability that the difference is not a true difference is less than one chance in 100 by the use of the Fisher t device

On the Ohio Literacy Test and on the reading tests such a true difference was not found to be evident. In comparing the scores on the Literacy Test, the IQ scores were used, but in the comparison of the reading tests, month differences in grade levels between the Monroe Reading Test given in the original study and the Stanford Achievement Reading Test given in the followup were used as the means for comparison This was, of course, a crude evaluation, but it seemed to be the only feasible means of comparison The differences found by the use of Fisher's t indicate clearly that the differences in the Ohio Literacy Test scores and in the reading test scores are not true and significant differences Consequently, if these tests gave a fair estimate of reading ability, it would seem that the increase in the other test performances could not be directly attributable to a change in reading ability The increase in scores on the Stanford-Binet, Army Alpha, and Porteus Maze seems to be brought about in spite of, rather than because of, increased reading ability

FACTORS INVOLVED IN IQ CHANGE

It would seem to be highly important from a prognostic point of view if we could discover just what factors were important in bringing about the increase in IQ in this group of mental defectives Consequently, it was deemed advisable to attempt to ascertain whether or not any of the tests were indicative of future success from the point of view of the increase in IQ. Table 3 presents the cases in order of the degree of increase in Binet IQ from 1925 to 1943, and then gives the comparable IQ score of various indices in an attempt to ascertain whether or not prediction of the increase in IQ can be made from any of them

From Table 3 there seems to be no general trend in the original data from which we might have adequately predicted the increase in IQ that did eventually occur. However, in order to be sure that there was no significant correlation between any of the test scores and the degree of change in IQ, each test was correlated by the

٭rank-difference method with the change in IQ. The results indi-
cated that there is no significant correlation between any of the tests
or the social scale and the degree of change of the IQ. Conse-
quently, we can readily see that none of the early tests predict
whether an individual would show an increase in IQ, or where he
would stand in relation to the others in the original group. Conse-
quently, we are forced to the decision that for this particular

TABLE 3

COMPARISON OF IQ's OBTAINED ON VARIOUS TESTS WITH THE CHANGE IN BINET IQ

CASES	CHANGE IN BINET IQ	PORTEUS IQ IN 1925	BINET IQ IN 1925	ARMY ALPHA IQ IN 1925	OHIO LITERACY IQ IN 1925	SOCIAL INDEX IN 1925
Case 6	36	82	68	66	69	90
Case 8	26	82	65	73	98	83
Case 4	21	61	58	58	59	46
Case 5	18	59	61	73	84	79
Case 3	11	79	66	65	65	86
Case 7	7	85	76	81	77	45
Case 2	6	71	56	63	67	100
Case 1	−2	72	69	55	55	73

group, at least, there is nothing in the original data which ade-
quately predicts the changes found

SOCIAL ADJUSTMENT

In considering the social adjustment of these individuals, the
major point of emphasis seems to be that here is a group of indi-
viduals classified as mental defectives, making an adequate social
adjustment in the same city in which they had been thus classified
18 years before   The degree of adjustment varied, of course, with
the individual, but all of them seemed to be making a constructive
contribution to society in some way or another, many of them being
valuable cogs in our country's war machine.   In considering the
data concerning the social adjustment of these individuals, it seemed
advisable to present the voluminous material in graphic form so
that a comparison of the individuals could be made in a more
concise manner   Table 4 presents graphically the important aspects
of the individual's personal and family adjustment.

It is interesting to note from these data that all but one of these
mental defectives is married, although one individual has been

TABLE 4

PERSONAL AND FAMILY ADJUSTMENT

SUBJECTS	LOCALE OF HOME NEIGHBORHOOD	FAMILY GROUP	LENGTH OF MARRIAGE	ADULT COURT RECORD	EDUCATION
Case 1	Four-room house, downtown district	Subject, wife, and 7 children	15 years	Arrested once for reckless driving	6th grade at age 17
Case 2	2-flat apt, near State Capitol bldg	Subject and wife	13 years	None	5th grade at age 15
Case 3	Small 4-room apt, downtown district	Subject and second wife	1 year	None	7th grade at age 16
Case 4	Small 4-room apt, downtown district	Subject, wife, and one child	9 years	Arrested twice for drunkenness and disorderly conduct	6th grade at age 17
Case 5	Single room, downtown district	Not married, lives alone		None	7th grade at age 16
Case 6	4-room apt, ave residential district	Subject, wife, and 4 children	15 years	None	9th grade at age 15
Case 7	2½-room apt, ave residential district	Subject and wife	3 years	Arrested once for speeding	10th grade at age 18
Case 8	Five-room house, suburban district	Subject and wife	7 years	Aressed once for drunkenness and disorderly conduct	8th grade at age 15

divorced and married again   The lengths of their marriages have ranged from one to fifteen years, the average length of marriage being nine years   Although in the main, the neighborhood locale of these individuals is inferior, three of the families live in a fairly nice residential section of the city, and the individual with a prognosis in the original study as being the most inferior individual with the least chance to succeed owns his own home at the present time. It is also interesting to note that none of these individuals have a record of court commitment in their adult years for any serious crime against society.

Table 5, which is concerned with the vocational and economic adjustment of these individuals, indicates that each of the men has a socially acceptable job with salaries at the present time ranging from $38 to $55 per week   Over the past five years all of these men have been working regularly with an average salary ranging from $25 to $45 per week   Five of the eight men have worked with the same company for periods ranging from three to fourteen years   In every case, the individuals have planned for the future to the extent that each family had some type of life insurance policy ranging from $500 to $4,500   Six of the individuals own automobiles, and six have much of their own furniture   In all cases there seemed to be an adequate social and economic adjustment to our complex society

It was also felt advisable to rate these individuals according to a scale whereby individual differences in social status might be ascertained   Since the Vineland Social Maturity Scale is perhaps the best objective scale available to determine the social competency of individuals, this scale was utilized in the anticipation that it would afford a clear differentiation of the social competency of the individuals.   In addition to this objective scale, the writer attempted to construct a scale evaluating the social competence which might more adequately apply to this particular group. Consequently, ten items were chosen, and by means of the paired-comparison method an evaluation of the social competency according to these ten traits was ascertained   These traits included present and past family relationships, physical home environment, vocational adjustment, economic status, organizational memberships, other extra-home activities, neighborhood status, educational progress, and emotional maturity   This is admittedly a crude and necessarily subjective evaluation, but it does give some indication of the social and eco-

TABLE 5

VOCATIONAL AND ECONOMIC ADJUSTMENT

SUBJECTS	PRESENT OCCUPATION	LENGTH OF TIME ON PRESENT JOB	AVE WEEKLY SALARY		PRINCIPAL ASSETS AT PRESENT TIME
			PRESENT TIME	LAST 5 YEARS	
Case 1	Truck driver for construction company	4 years	$40 00	$35 00	4-room house, furniture, car, $2000 life insurance
Case 2	Streetcar line repairman	8 years	38 00	33 00	Furniture, car, $1500 life insurance, $50 war bonds
Case 3	Truck driver for beer company	2 months	35 00	27 50	Radio, $500 life insurance
Case 4	Laborer at U S Army Depot	7 months	55 00	25 00	Furniture, car, $1500 life insurance, $50 savings account
Case 5	Taxi driver	7 years	50 00	30 00	$1000 life insurance, $100 war bonds
Case 6	Mach assembler—airplane factory	2 months	45 00	40 00	Furniture, $1000 accident insurance, car
Case 7	Welder—machine tool factory	3 years	46 00	42 50	Furniture, refrigerator, car, $1000 life insurance
Case 8	Shipping clerk—glass company	14 years	50 00	45 00	Furniture, car, $4500 life and accident insurance, $300 war bonds

nomic competency of the individuals as the writer found them to be • Then by the use of the rank correlation method, the relative social adjustment of these individuals was ascertained

After discovering the degree of social and economic adjustment by this scale, it seemed advisable to ascertain what relationship existed between this social scale and the change in IQ   Table 6 indicates this relationship graphically

TABLE 6

THE RELATIONSHIP OF THE SOCIAL ADJUSTMENT OF EIGHT MENTAL DEFECTIVES
TO CHANGE IN IQ

ITEM	CASES								p	r	Pr
	I	2	3	4	5	6	7	8			
Social Scale *	5	8	7	4	6	2	3	1	64	66	04
Change in IQ *	8	7	5	3	4	1	6	2			

* Indicates rank-order of individuals

The table indicates that there is a correlation of 66 of the degree of social adjustment and the change in IQ   Although this is not an exceptionally high correlation, it is significantly in the right direction   It may be true that these subjective judgments of social competence may have been influenced by the degree of intelligence of the individual, although most of the items were such that a fairly objective analysis could be made, and this social scale had a correlation of 84 with the Vineland Social Maturity Scale   At any rate, from these data there seems to be a certain relationship between social competence and the changing IQ which deserves further investigation.

CONCLUSIONS

1 Of 40 individuals who had been classified during adolescence as mentally defective, 18 were still living in the city where the original diagnosis had been made eighteen years before

2 Eight of this group of 18 mental defectives have been tested, and show a marked increase in test rating on the Stanford-Binet Intelligence Test. The mean increase of the group on the 1916 Binet was 3 years and 6 months in mental age, and 15 4 points in IQ. The mean increase on the 1937 revision was 4 years and 1

month in mental age, and 27 2 points in IQ   This difference is ,
additionally significant since the mean age of the group was 13
years 10 months at the time of the original testing

3 There also seems to be a considerable increase in performance
on the Army Alpha, the mean IQ increase being 10 8 points; and
an increase of 24 0 points on the Porteus Maze   The increases on
the Ohio Literacy and reading tests were insignificant, and it seemed
evident that the increases in IQ were not due to increased reading
ability.

4 There was a correlation of 66 between the changes in Binet
IQ and the degree of social adjustment as measured by a paired-
comparison method on ten items

5 At the present time, seven out of eight of these mental defec-
tives are married, and four of the married men have a total of 12
children.

6. Every man of the eight has a socially acceptable job with an
average weekly salary of from $35 to $55, and an average weekly
salary of $25 to $45 over a period of the last five years

7. None of the individuals has a court record for any serious crime
in society in their adult years

IMPLICATIONS

The data regarding these eight men who were classified 18 years
ago as mental defectives prove conclusively that some feebleminded
and borderline individuals can and do make suitable adjustments
in our complex society. As more and more evidence is tending to
affirm this fact, we realize that feebleminded children need not be
discarded by society as useless entities   It seems, instead, that it is
probable that the majority of these individuals are potential civilian
assets, who can be developed into real assets if the proper training
is provided

In consideration of what may be the best possible educational
opportunities for mental defectives, it is interesting to note that in
studies like the one made by Minogue (4) with feebleminded
persons under institutional care there was relatively little change
in IQ, and what change did occur was primarily in the direction of
loss in IQ. Other studies made of mental defectives under institu-
tional care bear out this same conclusion that little change in IQ
seems possible under institutional conditions

... Not enough research has been done as yet in studies of mental defectives in which the change or constancy of IQ is ascertained over a period of years outside of institutions However, studies like the ones Baller (1) and Fairbanks (3) conducted, whereby the social adjustment of mental defectives was ascertained after these individuals had lived in society for a number of years, and studies like the present study, in which the IQ increased considerably in every case as the individuals were living in "normal" society, seem to indicate that perhaps the best possible method of dealing with many mental defectives is not to institutionalize them, but to give them special educational training, while at the same time affording them the opportunity actually to live in the society to which they need to adjust The opportunity of the stimulation of community life would appear to have a definitely positive effect on both social and mental development which the institutionalized individuals cannot hope to acquire This point of view at the present time is purely a speculative possibility based on all too meager evidence, but if these mental defectives can be trained to become valuable and useful citizens, and the existing evidence seems to point to this possibility, then every effort should be made to provide such training and education outside of the institution for the feebleminded, for both the individual and society should richly benefit

REFERENCES

1 BALLER, W R   Study of the behavior records of adults who when they were in school were judged to be dull in mental ability   J genet Psychol, 1939, 55, 365-379
2 CHIPMAN, C E   Constancy of the intelligence quotient of mental defectives   Psychol Clin, 1929, 18, 103-111
3 FAIRBANKS, R   The subnormal child, seventeen years after   Ment Hyg, 1933, 17, 177-208.
4 MINOGUE, B M   The constancy of the I Q of mental defectives   Ment Hyg, 1926, 10, 751-758

THE INTELLIGENCE OF INDIAN CHILDREN AS MEASURED BY A PERFORMANCE SCALE *

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THIS investigation was undertaken to find out in what ways children of several Indian tribes in the plains and Southwest varied from tribe to tribe and from community to community within a tribe in their performance on a standard intelligence test. A secondary purpose of this study was to find out how the Indian children compared with white children on this test The test is a performance test of intelligence, rather than a paper and pencil test It requires a minimum of acquaintance with the English language

The intelligence test was only one of a number of techniques used in the Study of Indian Education The test results gain meaning through being combined with the results of a variety of other techniques, and when all the data are combined we have a unified picture of personality development in society Articles reporting the results of a single technique, such as this one, will be fully understood and our purpose fully realized only when they are studied in the larger context of the research project as a whole

Students of racial psychology have made comparative studies of intelligence, hoping to determine whether the intelligence of other racial groups is as high, higher, or lower than that of whites in American society A large variety of tests, in the main representative of those developed for and used with white school children, have been applied to the study of intelligence in other racial groups Anthropologists have been critical of these studies and have tended to attribute differences in test performance to cultural differences rather than to innate differences in intelligence Blackwood stresses

particularly the factors of language, speed, and motivation as well as problems of selection and social status[1] Klineberg lays special emphasis on the speed factor among the factors to be considered in interpreting intellectual differences between ethnic groups.[2]

Numerous studies of "racial mental differences" are reported in the literature The following is a brief summary of the studies of the intelligence of Indian groups in particular, including the tests used and the results obtained. The earliest reported study dates back to 1914 when Rowe administered Stanford-Binet examinations to 268 Indians and found 94 per cent of them to be below the norm for whites on the basis of chronological age[3] Hunter and Sommermeier in 1921 gave the Otis Classification Test to 715 mixed and full-blood Indians and found a correlation of .41 between degree of white blood and IQ[4] Garth et al[3] administered the National Intelligence Test to Indians of various tribes and localities, as well as to Mexicans and other ethnic groups His findings substantiate largely those of Hunter and Sommermeier Garth found Mexicans to do better than full-blood Indians, but not so well as mixed-blood Indians Garth and his associates[5] also found public-school Indian students to be slightly superior to U S. Government School Indians, and a rise in IQ with school grade The last finding led Garth to weight heavily the factor of education in test performance Haught[6] administered the Pintner-Cunningham Mental Test to little children, the National Intelligence Test to children of intermediate age, and the Terman Group Test of Mental Ability to those in the upper age-levels. He concluded that "Indians make lower scores than whites because they are lower in native ability" The results heretofore described were obtained mainly with the use of paper-and-pencil tests of general intelligence in which the verbal component is quite prominent.

These studies of Indians using verbal intelligence tests give results rather similar to the well-known studies by Sherman, Gordon, and

[1] Blackwood, B M A study of mental testing in relation to anthropology Ment Meas Monogr, 1927, Ser 4 (Dec)

[2] Klineberg, O An experimental study of speed and other factors in "racial" differences Arch Psychol, 1928, 15, No 93 Pp 109

[3] Summarized by Garth, T R Race psychology A study of racial mental differences. New York McGraw-Hill, 1931, Chaps 4 and 5

[4] Hunter, W S, & Sommermeier, E The relation of degree of Indian blood to score on the Otis Intelligence Test J comp Psychol, 1922, 2, 257–277

[5] Ibid Also see Garth, T R, "The intelligence of full-blood Indians," J appl Psychol, 1925, 9, 382–389

[6] Haught, B F Mental growth of the Southwestern Indian J appl. Psychol, 1934, 18, 137–142

others on white children living in isolated mountain hollows in Virginia, on canal-boats in England, and in isolated rural areas, where there is very little schooling These children tend to fall below the average of white children, and to suffer a decrease in IQ as they grow older. Such findings suggest that the observed differences of intelligence may not be due to racial differences

To determine the effect of language on test results, Jameson and Sandiford[7] administered both nonlanguage and language tests of intelligence to 717 mixed-blood Indians and obtained a difference of 5 points in IQ in favor of the nonlanguage test The more significant attempts to appraise the intelligence of Indians within the past 10 to 15 years have been made with the use of performance or relatively "culture-free" tests

Klineberg administered the Pintner-Paterson series of six tests to Indian and white children on the Yakima Indian Reservation and found (1) that Indian children took longer with form boards but made fewer errors, (2) that comparison of Indian and white groups in terms of total number of points obtained on the Pintner-Paterson Point Scale showed no differences between the two because the Indians made up in accuracy for their inferior speed, and (3) that correspondence of score with degree of white blood was lacking Whereas preceding investigations pointed to the superiority of the whites over the Indians on tests of intelligence, Klineberg's study is among the first to offer contradictory evidence and to suggest that test performance may be affected by cultural factors

A later study by Garth and Smith,[8] employing a nonlanguage and a language test with the same subjects, found (1) that Indian children show consistently a performance on the Pintner-Paterson test more nearly equal to white performance than they do on the verbal test, (2) that the IQ's on the performance test were 10–14 points higher than those on the verbal test

In more recent testings on Indian children, the general contention has been that the verbal component in tests of general intelligence handicaps the Indian child Tests that are relatively culture-free, of a performance variety, are considerably more appropriate than tests requiring facility with the English language for use, with Indian children

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[7] Jameson, E, & Sandiford, F   The mental capacity of Southern Ontario Indians   *J educ Psychol*, 1928, 19, 536–551
[8] Garth, T. R, & Smith, O D   The performance of full-blooded Indians on language and non-language intelligence tests   This JOURNAL, 1937, 34, 376–381

Some experimenters have tried to develop tests of intelligence for Indians consisting of tasks which aie familiar to Indian children. But no standardized test of this kind has yet been produced Dr Grace Arthur [9] has reported some experiences with testing Indian children She administered the Arthur and the Stanford-Binet to Indian children of elementary- and high-school age, and found the median IQ to be considerably higher on the Arthur Test. Cattell [10] experimented with the Stanford-Binet, the American Council on Education's Psychological Examination (arithmetical section), the Cattell Culture-Free Intelligence Test, and the Grace Arthur Point Performance Scale, and found the Arthur test to be more culture-free than any of the others. Everything considered, the Grace Arthur Point Performance Scale seemed most suitable for our purposes Therefore in order to study the intelligence of Indian children on a more extensive scale, to observe intertribal and intra-tribal differences in intelligence quotients, and to analyze the effects, if any, of white influences and amount of schooling on test performance, approximately 800 Indian children in the Southwest and West were given the Arthur test

PROCEDURE

Children from six Indian tribes were tested The tribes were: Sioux, Navaho, Papago, Hopi, Zuni, and Zia. The Hopi, Zuni, and Zia Indians practically all live within their respective pueblo towns The other tribes are much larger in population and cover wider areas of land The Navaho, with 50,000 people, inhabiting 30,000 square miles, are spread over the widest territory The Sioux and Papago have large reservations, with a dispersed population The Hopi number about 3500 living in eleven villages on three mesas surrounded by the Navaho Reservation.

Where the population is dispersed, as on the Sioux, Navaho, and Papago reservations, there is usually a wide variation of living conditions, economic welfare, and contact with the neighboring white culture. Consequently, two or more communities were chosen for study in these tribes in an effort to explore the variation of characteristics within a given tribe.

[9] Arthur, Grace An experience in testing Indian school children *Ment Hyg*, 1941, 25, 188–195.
[10] Cattell, R B, Feingold, S N, & Sarason, S B. A culture-free intelligence test II Evaluation of the cultural influences on test performance *J educ Psychol*, 1941, 32,

When the communities which were to be studied had been, selected there remained the problem of selecting the children to be, tested   The principles followed in selection of subjects were (1) All children from six through fifteen were to be tested unless the number was too great   (2) If the number was too large, a random sample of this group was to be made if possible   (3) If a random sample could not be obtained, the sampling procedure was to be described and recorded in detail   (4) After the sample was selected, all children who were in the sample but not actually tested were to be accounted for, preferably through a report from the school giving an estimate of their intelligence—thus giving some basis for knowing whether any extreme deviates were omitted in the testing program

The list of children with their ages was in each case taken from the school census   In some tribes the birth dates are not always definite or accurate   The recorded age of a child was checked by asking him and his parents his age   In some doubtful cases, church records were of value in establishing the age   Where the contact with white culture was precarious, birth dates were not available for all children and the field workers had to be content with getting the year of birth

Information is summarized in Table 1 for each of the tribes, giving numbers of children in the various communities and numbers actually tested, and describing the sampling procedures that were used

The groups can be put into three categories with respect to the degree of contact they have had with white culture   These categories are.

A   Considerable contact with white culture
   Pine Ridge (Sioux), Shiprock (Navaho)

B   Some contact with white culture
   Kyle (Sioux), Zuni, Oraibi (Hopi), First Mesa (Hopi), Zia, Topawa (Papago), Ramah (Navaho)

C   Little contact with white culture
   Hickiwan-GuVo (Papago), Navaho Mountain (Navaho)

The groups can also be put into categories with reference to the confidence we may have that the group actually tested represents the total group of children in the community   These categories are.

A   The group tested is almost surely representative of the total group   Topawa (Papago), Zia, Oraibi (Hopi), Kyle (Sioux), Ramah (Navaho)

TABLE 1

DATA ON SELECTION AND SAMPLING

Tribe	HOPI		NAVAHO			PAPAGO		SIOUX		ZIA	ZUNI
Community	Oraibi	First Mesa	Shiprock	Navaho Mt	Ramah	Hickiwan-GuVo	Topawa	Kyle	Pine Ridge	ZIA	ZUNI
Number of children 6 through 15	102	76*	c 200†	46	c 70‖	85¶	100	c 165**	c 500**	60	c 500††
Number of children in sample	99	76	97	46	38	85	100	79	46	60	79
Number of children tested	90	54	92	32	30	45	91	65	41	53	77

* Excludes children from the Tewa-speaking pueblo of Hano, and also some 40 children of predominantly Tewa affiliation in the other pueblos

† This number is a very rough estimate There were 97 children attending day school, and they constituted the sample

‖ The sample was selected by an anthropologist who is studying the region The children were selected so as to represent the total group in economic status and in proportion attending school

¶ In this isolated area, about 40 per cent of the children have never been to school Most of those tested were in school

** The research supervisor, a stranger to these communities, selected the samples so as to make the blood mixture conform to the pattern of the reservation, with correct percentages of full-bloods, intermediate mixed-bloods, and predominantly white mixed-bloods

†† About half of the children attend the Indian Service day school, the others going to a Catholic or a Christian-Reformed mission school There is said to be no difference between those who attend a mission school and those who attend the government day school Every sixth name was taken from the Indian Service school roll, and these children, together with their siblings, made up the sample

B The group tested is probably representative of the total group Zuni, First, Mesa (Hopi), Navaho Mountain (Navaho)

C We cannot say that the group tested is representative of the total group Hickiwan-GuVo (Papago), Pine Ridge (Sioux), Shiprock (Navaho)

Training of Examiners and Method of Examination The test was administered by seven people Four of them received intensive training at the hands of Dr Grace Arthur for periods ranging from three days to a week * It appears that only one of the test adminis-trators (Miss Howard) had as much previous experience as might have been desired On the other hand, every one of the adminis-trators was accustomed to working with Indian children and thus possessed an advantage over any test administrator who might have been sent out with much experience in administering the test but no experience with Indian children All except Dr. Leighton and Mr Hassrick were teachers in the Indian Service Dr Leighton is a physician in the Indian Service. Mr Hassrick is an anthropologist.

Dr Arthur proposed a shortened form of her test battery for use with the Indian children [11] The Casuist and Two-Figure Form Boards and the Manikin-Feature Profile test were omitted This left a battery with the same variety of tests as if the entire battery were used The tests omitted were those which had the least discriminative power and which were considered to be the poorer tests The Healy Picture Completion I was given but not included in the results. This test proved decidedly unsatisfactory for use with our subjects When the scores of a given age group were plotted on a frequency diagram, the distribution was extremely

* Miss Josephine Howard and Mr Morris Rosen received intensive training for three or four days in Santa Fe in May, 1942, shortly before they commenced testing Miss Howard had previous experience with the Stanford-Binet and other individual tests Mr Wayne Pratt spent a week in St Paul with Dr Arthur, learning to administer the test Mr Royal B Hassrick worked for a week on the Pine Ridge Reservation under Dr Arthur's super-vision Dr Dorothea Leighton observed Dr Arthur at Santa Fe and then worked up the test for administration to non-English-speaking Navaho children Dr Leighton had some previous psychometric experience in the course of her training in psychiatry Mr Sam Rosenberg was taught to administer the test by Mr Pratt, and he in turn trained two assistants to help him Mrs Fern Rouillard was taught by Mr Hassrick The testing was done as follows

Miss Howard tested at Zuni, Zia, and Shiprock (Navaho)
Mr Rosen tested at Topawa and Hickiwan-GuVo (Papago)
Mr Pratt tested at Oraibi (Hopi)
Mr Rosenberg and two assistants tested at First Mesa (Hopi)
Dr Leighton tested at Ramah and Navaho Mountain (Navaho)
Mr Hassrick tested at Pine Ridge (Sioux)
Mrs Rouillard tested at Pine Ridge and Kyle (Sioux)

[11] Arthur, Grace *A point scale of performance tests* Vol I Clinical Manual, Revised Edition New York Commonwealth Fund, 1943 Pp 58–63

ırregular, a fact which in itself proved that the test was not a good test for this group   There was further evidence leading to the same conclusion   This test requires the subject to choose from a number of pictured objects the ones which belong in the missing spaces of a picture of a house and playground with children and their pets Many of the pictured objects were so far outside the experience of the Indian children that they did not have names for them   Some subjects who made very good scores on the other tests made ridiculous errors on this test   The Healy Picture Completion I requires too much experience with white culture to be useful as a test of the intelligence of the Indian children in our study   For the Ramah (Navaho) children Dr Leighton substituted the Manikin-Feature Profile for the Healy Picture Completion, with unsatisfactory results

The test was administered according to the directions in Dr Arthur's manual, with one significant exception   Dr Arthur advised against using interpreters with non-English-speaking subjects   She recommended pantomime. The administrators preferred to use interpreters when English did not serve   An exception was Mr Rosen, who tried an interpreter in the Hickıwan-GuVo (Papago) district and then changed to pantomime with more satisfactory results   Dr Leighton used pantomime occasionally at Ramah and Navaho Mountain when the interpreter failed to get good results. It is possible that the scores of Ramah, Navaho Mountain, and Hickıwan-GuVo children have been lowered somewhat by difficulty in making them understand the directions for the test

Intelligence quotients were calculated for subjects aged 13 to 16 by the method used by Terman and Merrill,[12] which makes 15 the maximum value for the chronological age in the formula for calculating IQ

The testing was done between August, 1942, and May, 1943, most of the work being completed in the fall of 1942

RESULTS

The distributions of IQ's for the various groups of children in the study are shown in Table 2   These IQ's are based on performance on five tests, which make up the short form of the Arthur Performance Test that was used in this study   The five tests are: Knox

[12] Terman, L , & Merrill, Maud   *Measuring intelligence*   Boston Houghton Mifflin, 1937

Cube, Seguin Form Board, Mare and Foal, Porteus Maze, and Kohs Block Design

TABLE 2

DISTRIBUTION OF IQ's

(Percentages)

IQ'S	HOPI		NAVAHO			PAPAGO		SIOUX		ZIA	ZUNI
	Oraibi	First Mesa	Shiprock	Navaho Mountain	Ramah	Hickiwan-GuVo	Topawa	Kyle	Pine Ridge		
175–179	1										
170–174	1										
165–169											
160–164	1										
155–159	1	2									
150–154		2									
145–149	3	4				1	1	2			
140–144	4	2				1					
135–139	4	2	2	6		1	3				3
130–134	4	7	1			2	1	2			4
125–129	6	6	2			6	1	5			3
120–124	11	4	2	3	3	2	3	5		2	
115–119	9	9	2	3		7	7	3	14	10	5
110–114	8	6	4	6	3	2	2	11	10	13	7
105–109	10	15	9	3	10	7	11	8	7	2	12
100–104	10	13	10	22	10	4	9	18	10	11	13
95–99	8	7	16	6		9	19	11	12	19	12
90–94	6	7	17	6	3	4	7	6	7	13	17
85–89	6	7	10	3	13	9	9	8	10	11	10
80–84	3	6	6	22	10	24	4	11	12	8	12
75–79	2	2	6		10	7	6	5		6	
70–74			6	6	20	7	11	1			3
65–69			2	6	3	7	1	5	5	2	1
60–64				3	10	2			2	2	
55–59			1	3		4	1	1			
50–54			1		3	2				2	
45–49											
40–44						2					
N	90	54	92	32	30	45	91	65	41	53	77
Mdn	113 6	107 5	94 7	95 0	81 7	83 9	98 4	100 6	100 6	96 8	98 5
Mean	115 0	110 7	95 9	94 1	84 3	86 9	99 4	101 1	102 6	96 5	99 6
SD	21 6	19 3	16 3	21 3	19 0	17 8	18 2	18 2	13 3	14 7	15 2

Intertribal and intratribal differences can be perceived from inspection. For groups of the size studied here, the difference between the mean IQ's for two groups must be from 5 to 10 points before we can be certain that the difference is not due to chance It will be seen that the two Hopi groups are decidedly above the average for the white children on whom the test was standardized

The Sioux, Topawa (Papago), Zuni, Zia, Shiprock (Navaho), and Navaho Mountain groups performed about as well as white children The Hickiwan-GuVo (Papago) and Ramah (Navaho) were considerably below the other groups

Relative Difficulties of the Various Tests. The Indian children did consistently better on some of the individual tests than white children, and consistently poorer on others of the test battery. To compare the difficulty of these tests for the Indian children with

TABLE 3

RELATIVE DIFFICULTIES OF TESTS OF THE ARTHUR PERFORMANCE BATTERY, FOR INDIAN CHILDREN

TEST	AVERAGE AGE									
	6 5	7 5	8 5	9 5	10 5	11 5	12 5	13 5	14 5	15 5
	Av MA	Av MA	Av MA	Av MA	Av MA	Av MA	Av MA	Av MA	Av MA	Av MA
Knox Cube	6 17	6 88	6 97	7 79	8 65	9 75	11 05	11 00	10 33	9 75
Mare and Foal	7 06	7 33	8 80	9 63	11 47	11 68	13 20	14 02	14 67	15 83
Seguin Form Board	6 24	6 97	8 29	8 95	9 88	10 17	11 60	11 77	12 09	12 95
Porteus Maze	6 96	7 69	9 17	10 39	10 39	13 78	13 13	14 48	15+	14 68
Kohs Block Design	6 59	6 95	7 61	8 63	9 09	9 93	10 74	11 60	11 90	12 63
Healy Picture Completion I	5 78	6 16	7 12	7 72	8 35	8 92	9 57	9 83	9 98	10 80
Number of Subjects	53	72	75	66	80	73	77	63	68	61

their difficulty for white children we found the average raw scores for the Indian children by yearly age groups for each test The subjects from all the tribes were grouped together for comparison with white children These scores can be compared with average raw scores made by the group of white children upon whom the test battery was standardized[13] Further, an average mental age was calculated for each age group on each test using the norms given in Dr. Arthur's manual The results are given in Table 3 The tests could then be placed in the order of these average mental ages. Following this procedure, we found the order of the tests,

[13] Arthur, Grace. *A point scale of performance tests.* Vol II. New York The Commonwealth Fund 1933. Chap 3

from easiest to most difficult, to be Porteus Maze, Mare and Foal, Seguin Form Board, Kohs Block Design, Knox Cube, Healy Picture Completion I There was remarkably little difference in this order from one age to another The Mare and Foal was first, and the Maze second, in a few age groups The Seguin was almost always third, the Knox Cube was fourth and the Kohs fifth in a few groups The Healy Picture Completion was nearly always last On the Porteus Maze and Mare and Foal, the Indian group taken as a whole was superior to white norms at nearly all ages.

We carried this procedure through for the Oraibi (Hopi) group separately, and found the same order of difficulty Inspection of the data indicated that this order would be followed with only slight variations in all of the tribal groups

Sex and Blood-Group Differences There were very few sex differences The most striking of these was found at Navaho Mountain, where 22 boys averaged 101 and ten girls averaged 81 At Topawa (Papago), 43 girls averaged 101 and 48 boys averaged 97 This is not a statistically reliable difference At Oraibi (Hopi) 45 boys averaged 117 5 and 45 girls averaged 111 8 This is not statistically reliable None of the other sex differences was as high as four points.

There were no significant IQ differences among blood groups in the case of the Sioux when the total Sioux group was divided into three subgroups according to degree of white blood.

DISCUSSION OF RESULTS

There are considerable differences between tribes and between certain groups within tribes Social anthropologists advance the hypothesis that differences in test performance among groups such as these may be due to differences in contact with white culture To test this hypothesis we can compare the results for groups with different amounts of contact with white culture.

The Pine Ridge (Sioux) and Shiprock (Navaho) groups are the ones most affected by white culture. These groups scored nearly the same as a typical group of white children The Hickiwan-GuVo (Papago) and Ramah and Navaho Mountain (Navaho) have had the least contact with white culture Hickiwan-GuVo and Ramah results are the lowest in the study, but the Navaho Mountain group did nearly as well as the more acculturated Shiprock

•(Navaho) group   The Hopi group are much higher than the white •norms, although the Hopi are less acculturated than the Sioux and Shiprock (Navaho)   Within the Oraibi (Hopi) group there is a difference which may be ascribed to contact with white culture * There were 21 boys and girls from Old Oraibi, the original settle- ment on top of the mesa   Their average IQ was 105   There were 70 boys and girls from New Oraibi, the new town at the foot of the mesa which was founded by a progressive group from Old Oraibi and which is more subject to white influence   The average IQ of this group was 117   Probably the influence of white culture is a significant factor in these differences, but not the only significant factor

Another hypothesis is that the amount of schooling is related to test performance, the greater the amount of schooling the higher being the performance   This is similar to the acculturation hypoth- esis, but by no means identical with it.   Only four of the Ramah group had been to school, their average IQ was 101   For the 28 who had never been to school, the average IQ was 80   A better test of this hypothesis is afforded by the Navaho Mountain data, where 12 subjects had never been to school   This group had an average IQ of 82, while the 20 subjects who had been to school averaged 102 However, in the case of Navaho Mountain we cannot be sure that other selective factors were not operating, one being a practice of sending the brighter children to school

This hypothesis can also be tested by comparing IQ with chrono- logical age   If schooling is an important factor, we should expect IQ to increase with increasing age, at least for the first few years of school attendance   Table 4 presents median IQ's of the Indian chil- dren at each age   There is no consistent gradation in IQ   Such irregularity as exists is probably due to chance   The data on each

* The superiority of the Hopi over the other groups in the study on the Arthur Test is parelleled by the superior performance in terms of intellectual capacity and efficiency on the Rorschach Test   Dr Alice Joseph, who gave the Rorschach Test to Hopi children, writes as follows   "While the results on the Grace Arthur Point Performance Scale obtained from Hopi children appear astonishingly high, and make a future check-up desirable, the Rorschach Inkblot Test seems to substantiate these findings in that the levels of form, elaboration and organization of Hopi children appear to be superior to those of the other Indian tribes studied   The Rorschach Test does not provide us with a definite IQ   It can, however, determine the intellectual capacity and efficiency within more elastic boundaries as 'feeble-minded,' 'dull-normal,' 'low-average,' 'high-average,' 'superior,' and 'very superior'   It seems that the average for Hopi children on this test would rank between high-average and superior "—Personal communication from Dr Joseph.   The Rorschach Test results on the various tribes in the study will be reported fully by Dr Joseph and others in a forthcoming monograph

tribal subgroup were examined for possible IQ trends which might be lost in the larger totals of Table 4 No significant trends were discovered.

There is an interesting possibility that hereditary differences may account for some of the group differences The Navaho Mountain group has an unusually high degree of common heredity, for nearly everyone is descended from a certain Navaho man and his three wives, who were sisters, and his niece and her husband, who migrated to this region between 1870 and 1900

TABLE 4

RELATION OF CHRONOLOGICAL AGE TO TEST PERFORMANCE

AGE IN YEARS	6	7	8	9	10	11	12	13	14	15
Median IQ	100 7	96 9	97 3	96 9	91 8	96 3	99 5	96 6	91 9	94 5
Number	48	54	59	65	65	54	59	53	49	47

The results on the Sioux children are of special interest because they can be compared with the results of a Kuhlmann-Anderson (verbal) intelligence test which was administered as part of the school program at Pine Ridge in the spring of 1943 A total of 30 of the boys and girls who were given the Arthur test were given the Kuhlmann-Anderson The average IQ of this group on the Kuhlmann-Anderson was 82 5, with a standard deviation of 13 5 The average Arthur IQ of this group was 102 8, with a standard deviation of 19 1. The product-moment correlation coefficient between the two sets of scores was 53± 09 It appears that teachers might be led to underestimate the learning ability of their Indian pupils if they relied upon the results of a verbal test such as the Kuhlmann-Anderson.

The results of this study cast some doubt on the statement that Indian children are slower than white children when they work on tests This inference has been drawn from Klineberg's study, in which the Mare and Foal and Casuist Form Board tests were used. In the Arthur test, the Mare and Foal and Seguin Form Boards are exclusively speed tests Errors or false moves are not penalized as they are in the scoring method used by Klineberg The Indian children in our study did better than white children on the Mare and Foal and almost as well on the Seguin Form Board

SUMMARY AND CONCLUSIONS

The Arthur Point Performance Scale in a shortened form was used to measure the intelligence of 670 Indian children aged 6 through 15 in 11 communities of the Navaho, Hopi, Zuni, Zia, Papago, and Sioux Indian tribes Practically all the subjects were full-blooded Indians except for the Sioux, where the sample conformed to the pattern of blood-mixture on the Reservation   In most cases, practically all the children of a community were tested or a representative sample was tested. The Hopi subjects were definitely above the norms for white children on the test, and the remaining groups were approximately at the norms for white children, except for one Papago and one Navaho group   These two groups fell substantially below other groups from the same tribes The order of performance on the tests which make up the battery was, for the Indian group as a whole, from best to worst: Porteus Maze, Mare and Foal, Seguin Form Board, Kohs Block Design, Knox Cube   The results of this study indicate that Indian children do about as well as white children on a performance test of intelligence, and that differences exist from tribe to tribe and among communities within a tribe—differences of the sort that are found among groups of white children in various communities.

Taking into consideration the limitations of intelligence tests of the performance type, the following conclusions appear to be justified

1   American Indian children from several different tribes do as well as white children on a performance test of intelligence

2   Differences in test intelligence may be found between Indian tribes and between groups within Indian tribes, just as they may be found between various groups in the white population

3   There is some evidence that the Indian groups which are least influenced by white culture do not do as well on the Arthur test as those who have had more white influence and more schooling But this evidence is not conclusive   White influence and schooling are probably only a part of a complex of factors which determines test performance.

4   The statement that Indian children work more slowly than white children on speed tests is contradicted by the results of this study.

5 The Grace Arthur Performance Test may be used successfully with Indian children in the shortened form which was employed in this study

6 A performance test of intelligence would be more valuable for educational placement and guidance of Indian children in the Southwest than an intelligence test which requires much use of the English language

TWO DETERMINANTS OF SELECTIVE FORGETTING

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THE present investigation was suggested by a study performed by Wallen (8), the results of which he summarizes as follows:

when bogus ratings are presented as genuine, recalls of these ratings tend to be altered in such a way as to make them more compatible with the subjects' opinions of themselves

This investigation was designed to test the hypothesis that recall of bogus ratings presented as genuine will not only be altered by subjects' opinions of themselves but also by the evaluations of the subject contained in the bogus rating This hypothesis represents a tentative attempt to state at least two of the specific variables of which selective forgetting may be a function Rosenzweig (7) has differentiated between conditions establishing need-persistive reactions to frustration and those establishing ego-defensive reactions to frustration He found that subjects recalled incompleted jig-saw puzzles better when they had been presented informally than when they were presented as intelligence tests The poorer recall when the puzzles were presented as intelligence tests is indicative of an ego-defensive reaction according to Rosenzweig This result suggests that an evaluation or an implied evaluation of an individual is a determinant of recall, and affords indirect evidence for the second part of the above hypothesis. What Rosenzweig calls a need-persistive reaction can probably be identified with the Zeigarnik phenomenon, the conditions of which would seem to be another determinant of selective forgetting According to the above hypothesis, a third determinant of selective forgetting is agreement or disagreement with the subject's opinion of himself This study was conducted for the purpose of securing evidence on (1) evaluation of the subject and (2) agreement and disagreement with his opinion of himself as determinants of selective forgetting.

The writer is indebted to Wallen for the procedure used in this study. It will be described in detail in the next section The method of analyzing the data differs from that employed by Wallen,

however   It is perhaps in order, therefore, to describe the procedure briefly at this point   The first step consisted of presenting a list of adjectives to subjects which they were told to mark plus if they thought the adjective applied to them and zero if they did not think it applied   A week later they were given the same list of adjectives with plus and zero marks beside them which they were told represented ratings of them made by people who knew them   A week after this they were asked to recall these ratings and to mark the adjectives with a D if they considered them representative of desirable traits and a U if they considered them representative of undesirable traits   A feature of this study which is not present in Wallen's is that an attempt is made to determine the influence of evaluation by others on recall   The alleged rater's attributing a desirable trait or not attributing an undesirable trait to the subject will be considered a favorable evaluation whereas the alleged rater's not attributing a desirable trait or attributing an undesirable trait will be considered an unfavorable evaluation

PROCEDURE

The method of investigation employed has been described by Wallen (8)   The time relationships, however, differ from those which prevailed in his experiment.   The details of the present procedure follow.

Twenty-nine subjects in a class in General Psychology were given a list of 45 adjectives and were asked to mark a plus beside the adjectives which applied to them and a zero beside the adjectives which did not apply   One week later they were presented with the same adjectives and were told that ratings had been made of them by others   The experimenter read over the list of adjectives twice at a rate of three or four seconds per word while the subjects looked at the ratings   Actually these ratings were not genuine but were made up by changing 23 of the 45 ratings which the subjects had made of themselves, in accordance with a pre-arranged scheme   That the subjects accepted these bogus ratings as genuine was indicated by the surprise and relief they expressed at the conclusion of the experiment when the real nature of the ratings was revealed

One week later the subjects were asked to recall the bogus ratings which had been presented as genuine   As soon as the recall was completed the subjects were asked to mark each adjective as repre-

sentative of a desirable or undesirable trait by writing a D or a U after the adjective

A special precaution which this procedure requires is clearly explained by Wallen:

> In order to create the impression that the bogus ratings are genuine it is helpful to use traits which are hard to observe objectively Thus "wistful" or "adaptable" may mean many things to many people, and it is not difficult to convince a subject that he could receive a rating opposed to his own This is not so true of terms such as "good-looking" or "ill-bred"

RESULTS

In reporting the results we shall employ the symbols used by Wallen A D indicates that the subject considered the trait desirable and a U, undesirable The sequence of the symbols x and o shows how they were marked by the subject and by the alleged rater,[1] respectively This can be made clear by the following list of combinations of symbols·

1 Dxx A trait which the subject considers desirable and which both he and the alleged rater consider descriptive of him

2 Doo A trait which the subject considers desirable which neither he nor the alleged rater consider descriptive of him

3 Uxx A trait which the subject considers undesirable which both he and the alleged rater consider descriptive of him

4 Uoo A trait which the subject considers undesirable and which neither he nor the alleged rater consider descriptive of him

5 Dxo A trait which the subject considers desirable and which he considers descriptive of himself but which the alleged rater does not consider descriptive of the subject.

6 Dox A trait which the subject considers desirable and which he does not consider descriptive of himself but which the alleged rater considers descriptive of the subject

7 Uxo A trait which the subject considers undesirable and which he considers descriptive of himself but which the alleged rater does not consider descriptive of the subject

8 Uox A trait which the subject considers undesirable and which he does not consider descriptive of himself but which the alleged rater does consider descriptive of the subject

Table 1 contains the items of each type, their total number, and the percentage of errors made in the recall of each type

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[1] When the bogus ratings were presented the subjects were told that they represented composite ratings made by individuals who knew them Thus, the term "alleged rater" refers to alleged composite ratings

TABLE 1

THE TOTAL NUMBER OF EACH TYPE OF ITEM AND THE PERCENTAGE OF ERRORS MADE IN RECALL OF EACH TYPE

TYPE	TOTAL	PERCENTAGE WRONG
Dxx	279	14
Doo	92	27
Uxx	75	36
Uoo	137	17
Dxo	249	45
Dox	121	32
Uxo	79	32
Uox	189	42

In Table 2 data are presented showing the influence on recall of the evaluation of the subject made by the alleged rater. A favorable evaluation would consist of either attributing a desirable trait to the subject or not attributing an undesirable trait. An unfavorable evaluation consists of attributing an undesirable trait to the subject or not attributing a desirable one. In the comparisons made in Table 2 the influence of agreement or disagreement with the subject's opinion of himself is held constant. Thus, in the first comparison, Uox with Uxo, it is apparent that the subject and alleged rater disagree in both cases, and, in the second comparison, Uoo with Uxx, there is agreement in both cases. In each comparison the percentage of errors is smaller when the evaluation made by the alleged rater is favorable. The difference between errors in recall is significant beyond the 2-per-cent level in all comparisons except one.

TABLE 2

THE RELATIONSHIP BETWEEN EVALUATION OF THE SUBJECT BY THE ALLEGED RATER AND PROPORTION OF ERRORS MADE IN RECALL

TYPE	PERCENTAGE OF ERRORS	CHI-SQUARE
Uox (u)	42	2 4
Uxo (f)	32	
Uxx (u)	36	9 6
Uoo (f)	17	
Dxo (u)	45	5 7
Dox (f)	32	
Doo (u)	27	8 2
Dxx (f)	14	

u indicates an unfavorable evaluation of the subject by the alleged rater
f indicates a favorable evaluation of the subject by the alleged rater

. Table 3 shows how recall may be distorted by the subject's opinion of himself   In the comparisons made in this table the influence of the evaluation of the subject by the alleged rater is held constant That is, the two items compared both represent favorable evaluations of the subject by the alleged rater or both represent unfavorable evaluations by the alleged rater in every comparison   The items of each comparison differ, however, in respect to agreement or disagreement with the subject's opinion of himself   In every comparison, the percentage of errors in recall is fewer when the evaluation agrees with the subject's opinion of himself and the difference between errors in recall is significant beyond the 2-per-cent level in all comparisons except one.

TABLE 3

The Relationship between the Subject's Opinion of Himself and Proportion of Errors in Recall

Type	Percentage of Errors	Chi-Square
Uxo (d)	32	6 4
Uoo (a)	17	
Uox (d)	42	8
Uxx (a)	36	
Dox (d)	32	17 5
Dxx (a)	14	
Dxo (d)	46	9 1
Doo (a)	27	

d indicates disagreement between the subject's opinion of himself and the opinion of the alleged rater
a indicates agreement between the subject's opinion of himself and the opinion of the alleged rater

The comparisons made thus far have held constant any possible influence of the subject's estimate of desirability or undesirability of a trait upon recall.   It is of interest to inquire whether such an influence would have any differential effect upon recall when the influences of the subject's opinion of himself and evaluation by the alleged rater are held constant   The latter variables are held constant in the comparisons made in Table 4   The small chi-square values corresponding to the differences between errors in recall indicate that desirability and undesirability, as such, have no differential influence upon recall

Table 2 presented comparisons showing the relationship between evaluation of the subject by the alleged rater and percentage of

TABLE 4

The Relationship between the Subject's Estimate of Desirability or Undesirability of a Trait and Proportion of Errors in Recall

Type	Percentage of Errors	Chi-Square
Dxx (f) (a)	14	7
Uoo (f) (a)	17	
Dxo (u) (d)	45	4
Uox (u) (d)	42	
Dox (f) (d)	32	0
Uxo (f) (d)	32	
Doo (u) (a)	27	1 5
Uxx (u) (a)	36	

   d indicates disagreement between the subject's opinion of himself and the opinion of the alleged rater
   a indicates agreement between the subject's opinion of himself and the opinion of the alleged rater
   u indicates an unfavorable evaluation of the subject by the alleged rater
   f indicates a favorable evaluation of the subject by the alleged rater

errors in recall when influence of the subject's opinion of himself as well as any possible effect of desirability or undesirability of a trait was held constant   The comparisons made in Table 5 are similar except that the latter variable is not held constant   Table 4 indicates that this variable has no differential effect upon recall, and, therefore, it might be tenable to hold that the comparisons made in Table 5 are strictly comparable to those made in Table 2   Table 5 shows, as does Table 2, that the errors in recall are fewer when evaluation favors the subject   This is true for all comparisons, although the chi-square values are not significant at the 5-per-cent level of confidence for two of the comparisons   The results in respect to percentage of errors in Table 5 are in accord with the hypothesis that favorable evaluation by the alleged rater makes for fewer errors in recall, although they may not be as conclusive evidence for this hypothesis as the results in Table 2, since the influence of desirability or undesirability is not held constant

   Table 3 and Table 6 are similar   The possible influence of desirability or undesirability varies in the comparisons made in Table 6, however, as was the case in Table 5   The results in Table 6 are consistent with the hypothesis that, when the influence of evaluation by the alleged rater is held constant, errors will be fewer when there is agreement between the subject's and alleged rater's ratings than when there is disagreement   The differences between errors in

recall are significant beyond the 2-per-cent level in all except one of the four comparisons

TABLE 5

THE RELATIONSHIP BETWEEN EVALUATION OF THE SUBJECT BY THE ALLEGED RATER
AND PROPORTION OF ERRORS MADE IN RECALL WHEN ALL FACTORS ARE
HELD CONSTANT EXCEPT THE SUBJECT'S ESTIMATE OF
DESIRABILITY OR UNDESIRABILITY OF A TRAIT

TYPE	PRECENTAGE OF ERRORS	CHI-SQUARE
Dxx (f)	14	18 8
Uxx (u)	36	
Dxo (u)	45	4 2
Uxo (f)	32	
Dox (f)	32	3 1
Uox (u)	42	
Doo (u)	27	3 3
Uoo (f)	17	

u indicates an unfavorable evaluation of the subject by the alleged rater
f indicates a favorable evaluation of the subject by the alleged rater

If the hypothesis which has been proposed is correct, it would be expected that there would be a much smaller percentage of errors in recall for those items which represented both agreement with the subject's opinion of himself and a favorable evaluation of the subject than for those items representing disagreement and an unfavorable

TABLE 6

THE RELATIONSHIP BETWEEN THE SUBJECT'S OPINION OF HIMSELF AND PROPORTION OF
ERRORS IN RECALL WHEN ALL FACTORS ARE HELD CONSTANT EXCEPT THE
SUBJECT'S ESTIMATE OF DESIRABILITY OR UNDESIRABILITY OF A TRAIT

TYPE	PRECENTAGE OF ERRORS	CHI-SQUARE
Uxo (d)	32	13 6
Dxx (a)	14	
Dxo (d)	45	1 9
Uxx (a)	36	
Dox (d)	32	7 8
Uoo (a)	17	
Uox (d)	42	6 0
• Doo (a)	27	

d indicates disagreement between the subject's opinion of himself and the opinion of the alleged rater
a indicates agreement between the subject's opinion of himself and the opinion of the alleged rater

evaluation   The data in Table 7 support this expectation   Not only•
is there a much smaller percentage of error for the items represent•
ing agreement and a favorable evaluation, but the chi-square values
in every case are well beyond the 1-per-cent level   Two of the com-
parisons in Table 7 do not hold the factors of desirability and unde-
sirability constant, but it has been demonstrated by Table 4 that these
factors apparently do not have a differential effect upon recall

TABLE 7

COMPARISONS OF ITEMS REPRESENTING AGREEMENT WITH THE SUBJECT'S OPINION OF
HIMSELF AND A FAVORABLE EVALUATION WITH THOSE REPRESENTING
DISAGREEMENT AND AN UNFAVORABLE EVALUATION

TYPE	PERCENTAGE OF ERRORS	CHI-SQUARE
Dxx (a) (f) Dxo (d) (u)	14 45	62 0
Uoo (a) (f) Uox (d) (u)	17 42	23 1
Dxx (a) (f) Uox (d) (u)	14 42	116 0
Uoo (a) (f) Dxo (d) (u)	17 45	30 3

  a indicates agreement between the subject's opinion of himself and the opinion of the
alleged rater
  d indicates disagreement between the subject's opinion of himself and the opinion of the
alleged rater
  u indicates an unfavorable evaluation of the subject by the alleged rater
  f indicates a favorable evaluation of the subject by the alleged rater

DISCUSSION OF RESULTS

   Edwards (3), in a, discussion of the retention of affective experi-
ences, has suggested that pleasantness and unpleasantness as such
probably have little differential influence upon recall   Instead he
says:

   The important consideration   is not so much a matter of determining
whether an experience is pleasant or unpleasant, but rather a matter of determining
the presence or absence of conflict of this particular experience in terms of the
individual's values

It has been pointed out above that desirability or undesirability of a
trait (Table 4) seems to have no differential effect upon recall when
other factors are held constant   Thus, the results of this study seem
to confirm Edwards' conclusion that pleasantness and unpleasant-
ness are not important determinants of selective forgetting.

Edwards believes, as is apparent from the above quotation, that the individual's "system of values" or his frame of reference is the variable of chief importance affecting selective forgetting   His position is summarized by the following statements:

> Instead of placing emphasis upon the affective tone of the experience and then assuming this relationship to be indicative of conflict, we suggest that it might be more valuable to determine the presence or absence of conflict by another means As we have tried to show, this resolves itself to a determination of the frames of reference of the subjects Knowing this variable, we can then proceed to predict fairly accurately which experiences will tend to be forgotten and which will tend to be remembered

A possibility which occurs to the writer is that the variable which Edwards designates as frame of reference might be identified with what has been spoken of here as agreement or disagreement with the subject's opinion   The results of this study indicate that subjects will recall in terms of their opinions of themselves when other factors are held constant (Tables 3 and 6)   Edwards (1, 2) found that subjects will distort recall in terms of their political attitudes   In either case, agreement or disagreement with an opinion held by the subject seems to have an important influence upon retention   The reason for this may be that we acquire material more easily when it is in line, so to speak, with our opinions and attitudes than when it is not   Thus, a man may assimilate readily those parts of a speech which are in accord with his opinions because they fit in with habitual modes of responding. He may not assimilate as readily those parts which disagree for the opposite reason   It follows that he would recall more readily the positions which agree than which disagree because they were better assimilated in the first place   If this explanation is correct, the reasons for the easier acquisition of material which agrees would, it seems likely, have to be found among the principles of learning

We have also postulated that evaluation of a subject has an important influence upon retention   The evidence for this can be found in Tables 2 and 5. It was pointed out in the introduction that a study by Rosenzweig (7) would seem to confirm this hypothesis While direct evaluation of the subject was perhaps not present in his study, it seems entirely plausible that the poorer recall of incompleted jig-saw puzzles when they had been presented as intelligence tests may have occurred because of the implied evaluation of the subject's intelligence.

Mowrer's conception (4, 5, 6) of the role of anxiety in learning. affords a suggestion as to why unfavorable evaluations are *not recalled as well as favorable evaluations   An unfavorable evaluation is, of course, a form of disapproval which is a potent stimulus to the arousal of anxiety   Mowrer points out that anxiety can be regarded as a motivating condition, the reduction of which constitutes reinforcement or reward   The specific motivation will be getting away from the stimulus evoking the anxiety   Any activity which succeeds in achieving this will be reinforced   This would mean, then, that the perception of an unfavorable evaluation which would accompany anxiety would not be rewarded, but that activity, including perceptual activity, which got away from the stimulus evoking the perception of the unfavorable evaluation would be rewarded. A favorable evaluation, on the other hand, constitutes secondary reward, and it would, therefore, be expected that favorable evaluations would be better retained

The possibility of the two variables of agreement and disagreement with an opinion held by the subject and evaluation of the subject working hand in hand should not be overlooked   Thus, Edwards' subjects may not only have distorted recall as they did because of established political opinions, but also because they may have identified themselves with these opinions, which would result in their reacting to disagreement as though a personal evaluation of them were implied

Summary

This investigation was designed to test the hypothesis that recall of bogus ratings presented as genuine will not only be altered by subjects' opinions of themselves but also by the evaluations of the subjects contained in the bogus ratings   The procedure was one previously used by Wallen (8)   It involved having subjects mark adjectives plus if they considered that the adjective applied to them, and zero if it did not   A week later they were shown bogus ratings which were presented as genuine   A week after seeing the bogus ratings they were asked to recall them and to mark each adjective with a D if they considered it a desirable trait or a U if they considered it an undesirable trait   Results were analyzed by isolating the influences upon recall of favorable and unfavorable evaluations of the subject by the alleged rater and agreement or disagreement

between the alleged rater's opinion of the subject and the subject's opinion of himself.

One part of our hypothesis holds that, other things being equal, there will be fewer errors in recall when the evaluation by the alleged rater is favorable than when it is unfavorable A favorable evaluation by the alleged rater consisted of attributing a desirable trait to the subject or not attributing an undesirable one An unfavorable evaluation by the alleged rater consisted of attributing an undesirable trait to the subject or not attributing a desirable one to him. When comparisons were made in which all factors were held constant except favorable and unfavorable evaluations by the alleged rater, it was found that errors in recall were fewer when the evaluations were favorable It was also found that errors in recall were fewer when evaluations were favorable in comparisons in which all factors were held constant except any possible influence of the subject's estimate of desirability or undesirability of a trait

The other part of our hypothesis holds that, other things being equal, there will be fewer errors in recall when the alleged rater's opinion of the subject agrees with the subject's opinion of himself than when it disagrees When comparisons were made in which all factors were held constant except agreement or disagreement with the subject's opinion of himself it was found that errors in recall were fewer when there was agreement than when there was disagreement When comparisons were made in which all factors were held constant except any possible influence of the subject's estimate of desirability or undesirability of a trait, errors were also fewer in cases where there was agreement than where there was disagreement

Evidence was also secured indicating that the subject's estimate of the desirability or undesirability of a trait had no differential effect upon recall of bogus ratings presented as genuine

According to the hypothesis, it would be expected that errors in recall would be much fewer when both agreement with the subject's opinion of himself and a favorable evaluation were present than when disagreement and an unfavorable evaluation existed This expectation was supported by the data

It was suggested that the better retention of items which agree with a subject's opinion of himself might be the result of their being better assimilated in the first place. Mowrer's conception of the role

of anxiety (4, 5; 6) in learning was used to explain the better retention of favorable evaluations

REFERENCES

1 EDWARDS, A L   Political frames of reference as a factor influencing recognition   This JOURNAL, 1941, 36, 34–50

2 EDWARDS, A L   Rationalization in recognition as a result of a political frame of reference   This JOURNAL, 1941, 36, 224–235

3 EDWARDS, A L   The retention of affective experiences—a criticism and restatement of the problem   Psychol Rev , 1942, 49, 43–53

4 MOWRER, O H   A stimulus-response analysis of anxiety and its role as a reinforcing agent   Psychol Rev , 1939, 46, 553–565

5 MOWRER, O H   Anxiety-reduction and learning   J exp Psychol , 1940, 27, 497–516

6 MOWRER, O H , & LAMOREAUX, R R   Avoidance conditioning and signal duration—a study of secondary motivation and reward   Psychol Monogr , 1942, 54

7 ROSENZWEIG, S   Need-persistive and ego-defensive reactions to frustration as demonstrated by an experiment on repression   Psychol Rev , 1941, 48, 347–350

8 WALLEN, R   Ego-involvement as a determinant of selective forgetting   This JOURNAL, 1942, 37, 20–40

BELIEF AND DESIRE IN WARTIME

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IT is a truism in social psychology that what one wishes determines what one believes, but knowledge and experiences also influence beliefs. Certainly all persons do not think wishfully to an equal degree, nor does any person think wishfully to the same degree on all questions Three studies, by Lund (5), McGregor (6), and Cantril (1), bear directly on this problem Lund required students to rate questions on belief and desire scales Statements desired by the group were also accepted as true by the group, and vice versa, the correlation between mean ratings being o 88 Several weaknesses in methodology make it impossible to accept Lund's finding as applicable to all belief situations Judgments on both scales were obtained simultaneously, which may have heightened the correlation Another spurious element may have entered in the choice of items to be rated One finds, for instance, that he included the superstition, "Does a black cat crossing your path bring bad luck?", which was rated as undesirable and disbelieved But no "acceptable" superstition, about picking up pins or wishing on the moon, was included Perhaps the most serious limitation on Lund's data is the artificial judgment required To desire something is to have an emotional attitude toward it, it is very doubtful whether one is seriously concerned whether Shakespeare wrote *The Merchant of Venice* One may rationalize some response to the 20-point desire-scale, and the questionnaire would evoke such ratings, but their genuineness is doubtful For the social psychologist, it is important to know how belief and desire are related for real-life questions, rather than for questions which are artificial and unknowable. Lund's results, therefore, are valuable only as a tentative indication

McGregor also utilized college students, calling for prediction of actual world events which might occur during the ensuing year Ratings of attitude or desire were correlated with prediction, and again belief and desire were found to be associated On many questions, however, persons believed what they did not desire, when the event was probable Those who wished an event were generally

more certain that it would occur than those who hoped that it could be averted On some issues the correspondence of belief and desire was slight, whereas on others it was pronounced McGregor concluded that the ambiguity of an issue, and its importance to a person, determine whether thinking in accord with desires is to be expected When a question is unimportant, any desire may be outweighed by whatever facts are known A situation is said to be ambiguous where varying beliefs exist among persons who are indifferent whether a statement is true or not If the group is unanimous in belief, but not in desire, it is evident that experiences and accepted facts or pseudo-facts mold the belief McGregor concluded that if a question is important to a group, and insufficient facts are known to force one conclusion upon the judges, belief will tend to correspond with desire

McGregor added the hypothesis, on *a priori* grounds, that three factors determine whether a particular individual believes what he desires or not optimism, cautiousness, and skepticism

Cantril's study dealt with predictions of such social events as the outcome of the civil war in Spain His questionnaire was presented to representatives of various adult groups There was a tendency for predictions by a group to agree with the wishes of the group, although the existence of undeniable facts might cause even Communists and bankers to agree at times Cantril attributes agreement among groups to the lack of ambiguity, or "structuration," of the issue The second factor he found likely to lead to wishful thinking on a given question is the existence of an internal frame of reference, or ego-involvement Presumably an internal frame of reference develops when a person has previously-formed attitudes toward the issue or related stereotypes, or where the effect of the issue on his own welfare is direct and obvious

Perhaps no opportunity for observing social behavior is so great as that presented by a war, because of the heightened awareness of social events and the generally uniform goals present among the population The present study attempts to observe the belief-desire interaction in this context, with particular attention to three questions·

> 1 Does the belief-desire relation appear as high for vital, immediate questions, as for the relatively remote questions used in other studies?

    2 Is the belief-desire relation higher for some statements than others? Does the importance-ambiguity relation account adequately for these differences?

    3 Are all normal persons equally subject to autistic thinking?

PROCEDURE

The opportunity for this study came as a by-product of another investigation of wartime morale. A test of 50 items had been prepared to detect which students were overoptimistic regarding the war, which overpessimistic, and which realistic The test and its underlying assumptions are discussed at length in the basic report of the morale study (3) The original statements were selected from papers written by high-school seniors in November, 1941, in response to the question. "If the United States enters the war, how will your life be affected, both during the war and permanently?" The statements used were those which appeared to be of concern to a sizeable number of young people In the final test, students were asked to predict the likelihood of such events as "Saving money during the war will be impossible for most people" Many of the statements in this list were pessimistic, that is, they dealt with predictions of unpleasant happenings The test was given to two groups of college psychology students on February 19, 1942 (Singapore fell February 15), with these instructions.

You are to indicate what effects you think the war will have on the United States as a whole Each item in the test states an effect some people have said the war will cause You are to show how likely you think each effect is by circling the proper key letter on the answer sheet Circle
CY (certainly yes) if you think the effect is *certain to happen*
PY (probably yes) if you think the effect is *more likely to happen than not*
E   (equally likely) if you think the effect is *equally likely* to happen or not to happen
PN (probably no) if you think the effect *probably will not happen*
CN (certainly no) if you think the effect is *certain not to happen*

Four days later, without previous warning, the questions were again presented, students being asked to indicate how desirable each effect was, using the five-point scale certainly desirable (CY), moderately desirable (PY), neither desirable nor undesirable (E), moderately undesirable (PN), certainly undesirable (CN)

    Students were assured that responses would have no effect upon their individual standings Sixty-one students completed both ratings.

RESULTS

The Belief-Desire Correlation Lund's statistical technique was used to analyze the general trend of relation between belief and desire The mean belief rating (MBR) was obtained by averaging the ratings of all subjects for each question, and the mean desire rating (MDR) was similarly obtained For each set of judgments, ratings were scored CY, $+2$, PY, $+1$, E, o, PN, -1, and CN, -2. The mean of the MBR's was -0.18, the standard deviation, 0 79. The mean of the MDR's was -0.57, the standard deviation, 1 15. Statements were generally believed when desired, and vice versa, but the correlation between these ratings was only 0 41, which is far less than that reported by Lund For statements of this type, in this particular social and emotional context, the belief-desire relation is only moderate

Belief and Desire for Individual Statements. The correspondence of belief and desire is closer for some statements than others The distribution of statements on the desire scale was divided into quintiles, and within each quintile three statements were selected. the one having the highest MBR, the one having the lowest, and the one nearest the median MBR for that group. These statements are presented in Table 1

Statements 1*a*, 2*a*, 3*a*, 4*a*, and 5*a*, which were relatively more believed than desired, seem almost a part of the stereotype of war The evils of war are rarely discussed without mention of depression and profiteering, American victory and the sending of troops overseas were also accepted by many persons without question, during pre-war discussion The spread of belief ratings for each question in group *a* is consistently small, compared to other statements This supports the hypothesis that ideas which are stereotyped show less correspondence of belief to desire than others about which opinion has not crystallized. For statements 1*b*, 2*b*, etc , belief and desire are closely associated These, except possibly 4*b*, were genuinely debatable in terms of the facts available to the subjects This is shown by the spread of response and the relatively high percentage of "E" responses to these items In contrast to the often-expressed, rather general ideas in group *a*, statements in group *b* seem to represent ideas regarding details of wartime living not previously considered by the group This supports strongly the McGregor--Cantril hypothesis that, when a question arises in the absence of a back-

TABLE 1

SETS OF STATEMENTS WITH COMPARABLE DESIRABILITY BUT DIFFERENT MEAN BELIEF RATINGS

| NUMBER* | STATEMENT | MDR | MBR | NUMBER OF STUDENTS RATING | | | | | |
| | | | | DESIRE | | | BELIEF | | |
				PY OR CY	E	PN OR CN	PY OR CY	E	PN OR CN
1a	America will win the war	1 9	1 4	60	0	1	55	6	0
1b	The war will end within the next three years	1 6	2	56	1	4	23	24	14
1c	The country will be richer than it has ever been before	9	-1 4	47	6	8	1	6	54
2a	Workers will have to work longer hours than they are used to	3	1 2	29	15	17	52	5	4
2b	Schools will be closed in any community which is bombed	2	3	34	4	23	30	14	17
2c	Women will take over the heavy industrial work usually done by men	-0 6	-0 4	14	16	31	11	17	33
3a	An American army will invade Europe before the war ends	-0 7	9	21	2	38	45	6	10*
3b	More girls than usual will become old maids because of the lack of men to marry	-1 2	-0 4	5	14	42	16	9	36
3c	Criticism of any activities of the government will be prohibited	-1 4	-0 9	6	4	51	11	6	44
4a	Some people will make fortunes out of the war	-1 5	1 2	4	2	55	47	8	6
4b	The American mainland will be invaded by enemy troops	-1 7	-0 4	3	1	57	11	17	33
4c	Social affairs and shows will be stopped, except benefit performances	-1 5	-1 4	3	4	54	1	4	56
5a	There will be a depression after the war	-1 8	1 3	2	1	58	51	9	1
5b	Prices on food will rise so high that most people cannot afford a balanced diet	-1 8	-0 9	2	0	59	7	8	46
5c	Food will become so scarce that civilians will go hungry	-2 0	-1 4	0	0	61	2	3	56

* Statements numbered 1a, 2a, etc, are believed more strongly than others at the same desire level, 1b, 2b, etc, have belief ratings normal for their respective desire levels, 1c, 2c, etc, have belief ratings lower than others at the same desire level

ground of experience and formulated public opinion, belief is likely
to lie in the direction of desire

Statements in group *c*, which are believed less than other events
equally desired, seem to have in common a character of hyperbole
Items 1*c*, 3*c*, 4*c*, and 5*c* are extreme in form, so that one would hesi-
tate to accept them as he hesitates to mark "true" examination ques-
tions containing words such as "always" and "never " Many of these
items were ambiguous, in the sense that facts were not available to
permit even the best-informed citizens to judge with certainty   One
may amend the ambiguity hypothesis to note that even strong desire
is incapable of forcing normal persons to accept extreme statements,
however ambiguous   A similar conclusion was reached by Poffen-
berger (7) in his studies of advertising. "The truth may be too
startling to be believed "

The generalizations regarding groups *a*, *b*, and *c* were confirmed
by a study of five additional statements of each type, one chosen
from each quintile of the desire-distribution   Lund's data seem to
support these conclusions also

It is difficult to test the hypothesis that the importance of a state-
ment leads to a high belief-desire relation, since in preparing this list
of statements about the war an effort was made to include only
important predictions   The ratings on the desire scale indicate the
extent to which individual statements were important to this group.
The many important statements, at either extreme of the desire scale,
do not give evidence for the hypothesis   Belief and desire ratings
at times corresponded, and at times were widely different   It might
appear that when one strongly desires an event he would be more
likely to let desire sway belief, but this expectation is not realized
in these data   Instead, it seems likely that one is more alert to gather
facts about a prospective event if it is important, so that the situation
is unambiguous for him   True, where there is no possibility of
acquiring a frame of reference to assist judgment, it is reasonable
to expect more wishful thinking about important events.   These
data do not support McGregor's view that "when the outcome of
the situation is of vital concern to the predictor, even a slight degree
of ambiguity of the stimulus situation provides opportunity for
wishes to operate   The factor of importance, therefore, is probably
the more heavily weighted of the two determining factors" (6,
p 192)   Were he correct, no citizen would believe his city could be

bombed and so take precautions, the emphasis in civilian morale would have to be on convincing the public that bombings matter little, so that they would then admit that they might be probable

"Unimportant" statements, where desire ratings centered about the "E" position, tended to be believed Of thirteen statements having MDR's between +0 75 and —0 75, only one had an MBR lower than its MDR Lund's data also support this conclusion

It is of interest to compare McGregor's finding that the majority of judges predicted correctly on nine issues out of nine with the accuracy of prediction in this study The MBR was greater than +0 5 for 12 statements, events up to May, 1944 show that 7 of these were true predictions and 4 erroneous (one is still uncertain). The MBR was below —0 5 for 18 statements, 14 of these were indeed false, 1 true, and 3, so far, uncertain The majority, when it errs in predicting, seems to err by accepting untrue predictions, rather than by rejecting true statements *However wrong some individuals may be, the majority seems well able to predict the future*

Individual Differences. Analyzing the ratings of each individual separately indicates whether the tendency to believe what one desires is present with the same strength in all persons For each person, the correlation between belief and desire ratings can be computed, Table 2 presents the correlations obtained for 15 selected students While there is a marked tendency toward wishful thinking on the part of some persons, the tendency is practically absent for others None of the negative values obtained is significantly different from zero.

A measure of the optimism of each student was obtained by scoring papers as in the normal use of the test (3) This key scored optimistic items, which a majority of judges considered desirable, as follows· CY, +2, PY, +1, and so on This scoring was reversed for pessimistic items. The most optimistic persons therefore received the highest scores. Out of the total group of subjects, the five most optimistic and five most pessimistic persons, together with five from an intermediate position on the scale, were studied intensively. Data for these students appear in Table 2 It is evident that the belief-desire relation is associated with optimism

McGregor also suggested that a tendency to believe what one desires is greatest for those who are least cautious in judgment, and those most skeptical of statements they hear. Column 4 of Table 2

shows the percentage of each person's belief-judgments at the two extremes of the scale, which is an index of lack of caution The most cautious persons fall in the intermediate group. Insofar as these few cases indicate, incaution is not associated with wishful thinking within a group where optimism is constant Skepticism makes one ready to reject statements presented When every rating of CY is scored +2, PY +1, and so on, the higher a person's mean belief rating, the greater is his tendency to believe statements Skepticism

TABLE 2

SUMMARY OF BELIEF-DESIRE CORRELATIONS AND OTHER DATA FOR SELECTED INDIVIDUALS

CASE No (1)	OPTIMISM SCORE (2)	CORRELATION BELIEF-DESIRE (3)	LACK OF CAUTION (PER CENT B RATINGS CY OR CN) (4)	SKEPTICISM (MEAN B) (5)
1	−35	−0 15	26	−0 6
2	−34	08	40	7
3	−27	−0 27	38	−0 1
4	−25	−0 10	42	4
5	−20	−0 01	26	3
6	−1	21	34	1
7	0	17	4	−0 1
8	4	23	8	−0 1
9	4	13	36	−0 1
10	6	12	16	−0 4
11	21	74	44	−0 4
12	24	73	40	−0 4
13	26	45	44	−0 3
14	28	33	37	−0 5
15	30	39	46	−0 5

is somewhat associated with optimism, since the majority of statements in this list were pessimistic Within any group where optimism is constant, there is a slight tendency for the most skeptical person to have a lower belief-desire correlation

These conclusions must be considered tentative, in view of the small number of cases Because the optimism, caution, and skepticism scores are not independent of the belief and desire ratings, final conclusions would be impossible The only way an ultimate analysis of wishful thinking can be reached is to obtain independent estimates of these variables

One hypothesis of great potentialities is suggested by an incidental finding Of the five cases in the pessimistic group, numbers 1, 2, and 3 have come to the senior writer's attention as being more or less severely maladjusted in relation to such wartime problems as the draft, scholastic difficulties, or social relations Among the optimistic group, numbers 11, 13, and 14 have given evidence of maladjustment regarding scholastic difficulties and other blockings All fifteen of these students were encountered under identical conditions, being members of the same psychology classes, yet none of the five cases in the intermediate group was thought to be maladjusted Since information of this sort, not gathered systematically, is open to bias, there is no reason for placing great weight on this finding

SUMMARY AND DISCUSSION

1 Fifty statements about living during wartime were judged as to probability and desirability by 61 college students shortly after war began

2 The correlation between ratings of belief and desire was 0 41, compared to the correlation of 0 88 reported by Lund for statements more removed from the subjects' daily lives

3 Some statements were believed more strongly than desired, these were apparently part of the stereotype of wartime living, having been widely discussed by the public before the war

4 Statements with closely similar mean belief ratings and mean desire ratings were highly debatable, in the light of the facts available to the raters They had generally received little public discussion before the war

5 Statements with higher desire ratings than belief ratings were characteristically extreme, even hyperbolic

6 Statements important to the students did not show an especially close correspondence of belief to desire

7 Statements to which the group was generally indifferent tended to be accepted rather than rejected

8. The majority showed considerable accuracy in predicting, but accepted some predictions which were actually untrue.

9 For individual students, the correlation of belief and desire on the fifty statements ranged from 0.74 to —0 27 Even on the same statements, the tendency to believe what one desires varies for different persons

10 The most optimistic students showed the highest correlation of belief and desire This results in part from the definition of optimism.

11 Cautious individuals, who rarely use positions CY and CN in reporting judgments, had no smaller belief-desire correlations than others equally optimistic, but incautious Caution was associated with the middle position of the optimism-pessimism scale

12. Assuming that rejection of statements indicates skepticism, there was a slight tendency for the most skeptical persons in a group of constant optimism to have a lower correlation of belief with desire.

13 Students who deviated in the direction of unusual optimism or unusual pessimism may be maladjusted

Belief is more often in accord with one's wishes than not, but this correspondence is great for some statements, and slight for others This study agrees with McGregor's finding that *ambiguity* in a stimulus situation leads to a close correspondence If facts are available on which completely objective persons could arrive at a prediction, even those who have strong wishes are likely to believe what the facts imply Facts, to influence judgment, must be in the minds of the judges, in this sense, all frames of reference are internal If a situation is unambiguous, in terms of the facts known to experts, but the people generally have no frame of reference regarding the situation, belief will be related to desires It is vital to distribute facts widely, if people are to avoid wishful thinking about their problems. One would expect the adolescent to let his wishes, rather than realism, determine his vocational choice, unless we make that situation unambiguous for him. The worker will anticipate pay raises, and the veteran pensions, in accord with desires, unless ambiguity is removed by clearly stated wage policies and pension policies.

A second factor affecting judgment is the *familiarity* of the proposition. Ambiguous statements which cannot be judged on the basis of evidence will be accepted or rejected in accord with desires if they are novel. If a statement, however unsupported by evidence, has been discussed frequently, it is relatively likely to be believed even when not desired, familiarity breeds consent The technique of securing acceptance by reiteration is common in propaganda

Even when both ambiguity and novelty are present in the situation, *plausibility* is also essential if desires and beliefs are to correspond   It smacks of circular reasoning to say that a statement must be plausible to be believed, but desires appear powerless to make one accept a statement if the statement appears extreme   Plausibility need have no relation to truthfulness, as was shown by Poffenberger's study of the elephant-on-a-trunk advertisement

This study does not support McGregor's conclusion that the importance of a statement to the group causes belief to follow desire Instead, statements rated very important are often judged in a direction opposite to desire   Seemingly, when one is much concerned about a problem, one seeks facts, and is alert to remember those one hears, so that the situation is less ambiguous for him and belief is less influenced by wishes.   McGregor's data, reexamined, support this view, since he found Communists more realistic than non-Communists in predicting membership in the party   *Importance* is likely to lead to correspondence of belief and desire only when there is no possibility of acquiring information on which to base a realistic judgment

For unimportant statements, it is likely that the tendency to *acquiescence* determines belief more than does desire.   When they have no basis of experience for making a judgment, the majority of persons agree to a proposition, though some persons are more prone to acquiesce than others   This is in accord with previous evidence by Lentz (4), Cronbach (2), and others   It follows that if we wish critical thinking about an issue, we must first make that issue important to the hearer   The cure for failure to criticize fallacies lies first in instilling values, and only secondarily in making facts available

Some persons are especially prone to believe what they desire to be true   This tendency is associated with optimism, but this is a definition of optimism rather than an explanation   McGregor's suggestion that cautiousness inhibits this tendency appears to be true only in that cautiousness is negatively associated with extreme optimism or pessimism.   The tendency to acquiesce, or the absence of skepticism, appears to be associated with wishful thinking, but the evidence for this is tenuous.   It was further found, subject to more refined investigation, that very optimistic and very pessimistic persons are likely to be maladjusted.   It is not surprising that the

maladjusted individual, faced by problems he cannot solve, should be pessimistic   Overoptimism, refusing to face reality, is a familiar symptom in mental disorder, lesser degrees of overoptimism may also be significant

The relationship between belief and desires has generally been interpreted as an aspect of wishful thinking, and by inference condemned   Another philosophy may be defensible: that expecting what is desired is a realistic view of life   After all, the average life must yield more satisfactions than dissatisfactions   To "Will my house burn down tomorrow?", an optimistic answer is warranted because such unpleasantness is the exception, rather than the rule Man's crops do usually come up, his friends continue friendly, and his general history has been one of fairly consistent progress toward a better life—or so one may contend   That does not imply that every event turns out desirably, but if completely valid predictions could be made, they might coincide with man's desires most of the time   A correspondence of belief and desire is to be condemned only when it exceeds a realistic optimism   To disregard facts is undesirable, but to be hopeful, within the limits set by facts, is a reflection of the experience that life is good   Perhaps that is why the majority can predict the future validly [1]

Somewhat allied to this position is an alternative view of optimism The writers have assumed that to be optimistic is to expect what one wants, the extreme optimist may be contrasted with the realist, and the person who is overpessimistic   One might say, instead, that the optimist and realist differ, not in what they think will happen, but in their outlook on those events   The optimist accepts or welcomes what he knows will come   Pollyanna was noted, not for refusing to face unpleasant facts, but for looking on the good side of events, finding something to be glad about in every situation   Where the psychologist has generally assumed that desire determines belief, this point of view more nearly implies that the optimist first draws his conclusions, then reorders his scale of desires to make reality acceptable   Neither viewpoint need be defended against the other, until a method for experimental inquiry is devised.   Probably there is truth in each hypothesis

[1] This and other studies of belief and desire have been based on college students or successful adults   Studies of the underprivileged or unfortunate might, because of their different experience, show quite different relationships

BIBLIOGRAPHY

1 CANTRIL, H The prediction of social events This JOURNAL, 1938, 33, 364–389
2 CRONBACH, L J Studies of acquiescence as a factor in the true-false test *J educ Psychol*, 1942, 33, 401–415
3 CRONBACH, L J Exploring the wartime morale of high school youth *Appl Psychol Monogr*, 1943, 1, 1–79
4 LENTZ, T F Acquiescence as a factor in the measurement of personality *Psychol Bull*, 1938, 35, 659
5 LUND, F H The psychology of belief This JOURNAL, 1925, 20, 63–81, 174–196
6 McGREGOR, D The major determinants of the prediction of social events This JOURNAL, 1938, 33, 179–204
7 POFFENBERGER, A T The conditions of belief in advertising *J appl Psychol*, 1923, 7, 1–9

A CRITIQUE OF NONDIRECTIVE METHODS OF PSYCHOTHERAPY

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THE development by Rogers (3, 4, 5) of nondirective methods of counseling and therapy should be clearly recognized as a new contribution of major significance to the methodology of clinical psychology and psychiatry. Although many of the theoretical foundations and methods of nondirective psychotherapy derive from antecedent sources, Rogers is the first to integrate and coordinate the basic principles into an internally consistent system Nondirective psychotherapy is more than just a synthetic regrouping of methods borrowed from older schools of thought and constitutes a genuine contribution to the armamentarium of psychiatry

The historical development of nondirective methodology is perhaps best understood from a consideration of the evolutionary forces operant in the field of clinical psychology   For the last twenty-five years clinical psychology has suffered a progressive decline in vitality as it passively suffered encroachments into its field of operations by other sciences   Although the first child study and mental hygiene clinics were organized under the auspices of university psychology departments, these movements were quickly taken over by the medical science of psychiatry.   Except for a few individuals who succeeded in establishing themselves as consulting psychologists, the field of psychotherapy was largely preempted by psychiatrists and psychoanalysts who relegated the clinical psychologist to the relatively subordinate position of laboratory technician whose major contribution was psychometrics   Clinical psychologists also found themselves most seriously handicapped by being cut off from the study of clinical materials which had largely come under the control of psychiatrists operating as administrators of mental hospitals and other institutions where case material was available for study.   In the absence of systematized training programs and other opportunities for working actively with large quantities of clinical materials, the clinical psychologist has too often operated in an

intellectual vacuum in which he was forced to acquire experience through the second-hand study of textbooks and whatever fortuitous informal contacts he could manage to negotiate for the study of case material With this limited and unsatisfactory background of training it is easy to understand why clinical psychologists have varied so much in clinical ability and have progressively lost prestige in competition with psychiatrists who have enjoyed much more standardized and intensive educational opportunities. Clinical psychologists have also been forced to contend with the legal aspects of the situation in the sense that their activities were so unorganized as to fail to secure recognition as one of the healing arts It has been necessary to exert considerable caution in limiting their activities to avoid malpractice suits in the event that the patient's condition suddenly changed for the worse while under treatment by the clinical psychologist

The practical result of this situation in interprofessional relationships has been that the clinical psychologist has limited himself to psychometrics and borderline counseling activities in areas where psychiatric resources are not available The strengths and weaknesses of the nondirective method may be partially understood in terms of the professional background of the clinical psychologist who has developed a technique to fit the limitations of the clinical situation in which he has been forced to operate Nondirective methods are relatively simple to master, require relatively little clinical experience with which to obtain results, and involve relatively small dangers of worsening the patient's condition by inept bungling Since the patient works out the solutions to his own problems, it follows that the clinician is relatively free from the possibility of being charged with malpractice. These comments have been intended to apply to the total situation in clinical psychology and not specifically to Dr. Rogers, who is one of the few clinical psychologists who have maintained clinical contacts to a sufficient degree to make possible intensive study of case material. As utilized by Dr. Rogers, nondirective methods open new vistas of clinical activity to psychologists and others who understand their limitations. It seems wise to reemphasize Dr. Rogers' statement that the new nondirective techniques will have more widespread usefulness in the guidance and counseling fields than in the treatment of mental disorders

POSITIVE FACTORS IN NONDIRECTIVE THERAPY

Patient-Clinician Relationships Nondirective methods emphasize, "client-centered" approaches to the study of personality The therapist submerges his own emotional needs and intellectual prejudices as completely as possible in the attempt passively to guide the patient by methods of indirection to a more comprehensive self-understanding The major responsibility for the direction and conduct of psychotherapy is subtly displaced from the clinician to the patient, who learns to gain insight into life situations and manipulate them actively for himself Instead of exhorting, arguing, urging, or persuading the patient to adopt some suggested course of action, the clinician tactfully and indirectly leads the patient to express, recognize, and transform his own attitudes with a minimum of regulation or interference from without Instead of being "told" what is the matter, the patient is led to discover it himself There can be no doubt of the value of client-centered therapeutic techniques One of the major criticisms of psychoanalysis is that preconceived theories of personality structure are foisted onto each individual case regardless of their applicability, *i e,* the analyst discovers in each patient the same stereotyped mechanisms which are postulated as universal in Freudian theory In all fairness to modern psychiatry, however, it must be admitted that a reorientation to the problems of the clinician-patient relationship has been occurring in all branches of psychotherapy and that this is not an exclusive contribution of nondirective technique Nondirective methods have been in general use by many experienced psychiatrists for many years even though no systematic formulation was attempted.

Autonomous Regulation of Personality In contrast with such directive techniques as psychoanalysis in which the patient puts himself in the hands of the clinician who actively analyzes, tears down, rebuilds, and resynthesizes the personality, nondirective methods recognize the advantages of allowing the patient to resolve his own problems with a minimum of outside interference Psychoanalysts in general are characterized by the blitheness and confidence with which they omnipotently assume the responsibility of reorganizing the personality of another human, and unbelievers may be forgiven if they express questioning doubt concerning the omniscience and psychiatric infallibility of the analyst who presumes to

. revise the works of God after communing briefly with the works of Freud. Nondirective methods may be regarded as a reaction against the dangers of extreme overregulation and psychic reconstruction as carried out by those who are overenthusiastic about the infallibility of some prevailing school of thought

It is of great value to assist the client to explore and resolve his own problems personally and autonomously with the clinician minimizing active direction and interfering as little as possible with existing patterns of personality integration

The Growth Principle Newer methods of psychotherapy emphasize that effective adjustment is the result of normal processes of growth and maturation operant within the individual as an infinite number of forces and stimuli interact and resolve themselves during development Therapy is directed toward releasing normal growth potentialities so that the individual gains more control over the forces within himself by acquiring more comprehensive insights In contrast with psychoanalysis, in which the transference between analyst and patient results in a father-son relationship with the patient more or less passively submitting to analysis and reeducation from without, nondirective methods utilize the clinician as a catalyst of growth for which the patient himself is actively responsible Growth occurs by resolution of forces from within instead of by reconstruction from without

Releasing Expression and Achieving Insight These chapter headings from Rogers (4) summarize two of the important therapeutic objectives of the nondirective method as well as all other treatment. By encouraging free expressions of feeling, mirroring the client's feelings and attitudes, and failing to impose arbitrarily patterns and goals, the clinician provides an ideal situation in which there is the fullest opportunity to ventilate and restructure the feelings and attitudes which have caused maladjustment. The client is subtly led to recognize and reconsider his feelings in new patterns or configurations which result in better insights into the total situation.

Avoiding Hostility and Undesirable Personality Reactions Rogers (3, 4, 5) emphasizes the general principle that therapy proceeds most effectively when the clinician maintains a rigorously detached and objective viewpoint and avoids any critical or regu-

latory action which might stimulate undesirable emotional reactions in the client. Nondirective procedures operate to produce objective and impersonal therapeutic relationships and thereby make therapy less complicated and upsetting by avoiding hostility and negativism in the patient who senses emotional or critical attitudes in the therapist Almost all psychotherapy is to some degree disturbing to the patient because it is deflating to the ego to be so maladjusted that it becomes necessary to place one's self in the embarrassing position of having to admit failure and seek help from others Any method which makes it easier for the patient to express himself freely and without danger of arousing critical or condemnatory attitudes marks a great therapeutic advance

It is also important, however, to express the opinion that the therapist should not endanger his effectiveness by being too cautious and timid about doing anything which might arouse hostility and negativism There are clinical situations in which the patient needs to be acquainted with critical attitudes and to face unpleasant realities. It has been said that one of the major values of institutional psychiatric treatment is that it forces the patient to mobilize all his resources in the effort to regain enough integration so as to leave such an unpleasant environment Some patients may be benefited by judicious shock and punishment

The Method of Controlled Associations One of the interesting variations of analytic technique is the method of distributive analysis outlined by Diethelm (1) in which the clinician skillfully directs the trends of the patient's associations and productions into areas which seem profitable of exploration There is similar value in the nondirective technique of putting subtle pressure on the client to verbalize his own attitudes progressively and thereby to ventilate his feelings under controlled conditions where the therapist skillfully guides the client to better insights By repetitious and leading questions, the client is indirectly led to achieve new orientations and structurings of his problems The nondirective treatment reported by Snyder (6) provides an excellent example of how a patient can be subtly drawn out along the lines of his own feelings and attitudes. This technique will be of value not only in counseling but also in the treatment of all types of mental patients

The nondirective technique utilizes controlled associations to explore any desired area of attitudes. Use of the questions "Why ?

Where? When? How?" makes it possible to uncover significant material and to force the patient to evaluate certain sequences of behavior for himself Another most valuable question is, "What do you think about that yourself?" All these questions are completely nondirective and the patient's attention is directed to causal relationships which had formerly been unrecognized and which he can quickly perceive now for himself without the embarrassment of having to "take it" from another person Through skillful questioning it is possible to implant any desired idea in the client's mind in such a manner that the client thinks he thought of it himself and is therefore more ready to accept it Nondirective methods are the foundation of the modern psychology of leadership by indirection instead of force

Self-Initiated Goals and Actions. Mental health is generally considered to involve internally consistent attitudes, unified goals and integrated personality The objectives of all therapy are to bring these conditions about as smoothly as possible with the patient himself striving to become adjusted and independent Lecky (2), another experienced clinical psychologist, taught as far back as 1936 that mind was an organization of mutually consistent ideas the nucleus of which was the person's conception of himself Using nondirective methods to lead the client to restructure his conception of himself, Lecky led his patients to acquire new attitudes and self-initiated goals which resulted in a transformation of their actions Nondirective methods are very effective in demonstrating inconsistent attitudes, conflicting goals, and disintegrating forces to the client in a painless manner

INADEQUACIES OF THE NONDIRECTIVE METHOD

The value of any new method of therapy is not to be determined by the seeming brilliance or rationality of its theoretical foundations but by a careful critique and evaluation of the results of its use. It is perhaps more difficult to objectify the results of psychotherapy than of any other type because each case is unique and it is never possible to determine what might have happened if no treatment at all had been given or if the results would have been different with slight variations in procedure. No one can refute the claim that the patient would have been better or worse if another method had been used. The therapeutic situation is so complex that there are unlimited possibilities concerning what might happen with

different techniques or therapists. A method which is very effective in one situation may be very unsatisfactory in the hands of another because of the different personalities involved The publication by Snyder (6) of a verbatim recording of what took place in a short-term nondirective treatment of an adult makes possible a detailed analysis of the technique in terms of what has been learned about psychiatric methods in general A number of specific comments may be made concerning various inadequacies which seem to detract from the effectiveness of this form of counseling as used in this case

Inadequacy of Case History Throughout the five sessions reported by Snyder (6) only the barest outline of a case history was obtained Little attempt was made to secure the background case material which a psychiatrist would consider absolutely essential for even a limited understanding of the total situation How does the counselor know that he uncovered the major problems of the patient? The experienced clinician knows that the presented complaint frequently involves only a minor aspect of the total problem and that it is necessary systematically to explore the total personality to obtain a comprehensive understanding Directive techniques are very valuable in obtaining a good case history When properly utilized, the patient accepts the directive technique without question and in fact derives considerable reassurance from the fact that the therapist is making such a careful investigation of the situation

Failure to Obtain Corroborative Evidence The patient's evaluations of himself have been accepted at face value in Snyder's nondirective treatment No effort was apparently made to interview the patient's wife or business associates to elicit further evidence from objective sources and to evaluate the situation as a whole One of the basic rules in treating mental patients is to obtain corroborative evidence since these cases are notoriously deficient in insight concerning the magnitude of their maladjustment

Inelasticity of the Method In our opinion it is undesirable to limit one's self to any one therapeutic technique rather than to utilize all available methods according to needs of each individual clinical situation Rigid adherence to nondirective techniques may prevent the clinician from giving adequate treatment in cases where directive methods would be more effective This criticism is not inherent in the method itself but rather in the use made of it. We mention it in this critique because Snyder in his footnote com-

mentaries on the treatment seems to imply that any deviation from the nondirective method would be very undesirable and even dangerous   Ideally, the clinical approach should be individualized and a judicious utilization of both directive and nondirective methods may be more effective than either alone

Superficiality of Contact with Patient   One of the most serious criticisms of this short-term nondirective treatment is that it never proceeded beyond the most superficial grappling with the patient's problems   The entire treatment limited itself to "surface" phenomena as contrasted with the "depth" analysis which has proven so fruitful in analytic psychiatry   The patient browsed along the edges of his problem, coming to grips with it only in terms of a few partial insights which would doubtless have been achieved as easily with other forms of therapy.   There are indications that the patient himself recognized the superficiality of the therapeutic approach and was vaguely dissatisfied with the conduct of the interviews   The therapist did a good job of "structuring" or selling the method he was using and the patient finally acquiesced to its use   It would have been interesting to have followup studies after several months to discover whether any lasting improvement occurred and whether Mr M was still satisfied with the results

Failure to Evaluate the Total Personality   Summarizing the failure to obtain an adequate case history and to secure corroborative evidence, it may be concluded that the superficiality of contacts with the patient precluded any comprehensive evaluation of the dynamic mechanisms operant in the total personality   This entire treatment of five interviews was limited to the consideration of one small area or part-functioning of the total personality   Even though one or two dynamic mechanisms are elaborated, one gets the impression that the counselor is dealing with symptoms rather than underlying causes.   It is true that Mr. M did get a "flash" of insight concerning what he might do about one aspect of his problem in the last two interviews but it might be questioned whether he developed any genuine insight into the dynamic mechanisms   The fact that the patient gives expression to feelings of satisfaction over the way the interviews were conducted (pp 134–136) and utters a few platitudes about the necessity of working out one's own problems cannot be accepted as evidence that genuine insights were attained.   The partial insights which Mr M relates on pages 116–120 are on surface

levels and do not indicate any genuine understanding of underlying personality mechanisms. How did this man get to be as he now is? Why did he develop this particular type of personality reaction? Do we really know much about Mr M at all at the end of five interviews? There are many questions to which no answer is available from a perusal of the course of treatment and which could reasonably be expected from the orthodox directive treatment of equivalent length

Conduct of the Interview It is very important that any therapeutic interview should be conducted in a natural facile manner which puts the patient at ease and quickly establishes the rapport which is so necessary for effective treatment With good rapport the patient is usually cooperative enough to carry the treatment through to completion even though parts of it may be unpleasant. There are no variable and established rules concerning how most effectively to conduct an interview and this is an individual matter which each therapist must determine for himself Most important, the counselor must try to discover what the patient has come to obtain, *i e ,* to satisfy the needs of the patient Some needs of the patient may be satisfied by nondirective methods but other needs may require more aggressive directive techniques

A valuable insight may be obtained into one of the inadequacies of nondirective technique as utilized by Snyder (6) by reading aloud the remarks of the counselor in the verbatim reports of the five interviews When reread aloud, many of the therapist's interjections seem stilted and inane In his attempts rigorously to limit himself to nondirective comments, the counselor frequently goes to excessive lengths to remain neutral and avoid interpretative statements It becomes very monotonous to hear the counselor conscientiously summarizing each of the patient's statements in order to produce recognition of feeling At some points we sense wonderment and dissatisfaction on the part of the patient and wonder how many revisits he would have made had the treatments been costing $20 per session

Failure to Follow up Significant Leads. One of the values of directive methods of therapy is that they enable the experienced clinician actively to explore the various areas of personality in which maladjustments appear to arise During the interview the patient frequently makes an apparently innocuous remark which may be

the key to much significant material the importance of which the patient himself is unaware   It is often of prime importance to utilize directive methods in overcoming the patient's resistances to uncover repressed material which may be of critical importance in understanding the case.   At least six times during the five sessions conducted by Snyder, the therapist failed to follow up significant leads which Mr M produced spontaneously and seemed anxious to elaborate upon   It would not have interfered with effective therapy in any way to have inquired further into the childhood illness (p 94), why it was necessary to satisfy himself about things (p 95), more about his worries and neurotic behavior (p 99), childhood experiences and the reasons for losing many jobs (p 109), his lost interest in physical sports (p 113), and more about his preoccupations and conscientiousness concerning the insurance business (pp 123, 137)   Even with the most skillful nondirective handling, there is some question whether all the responsibility for carrying on the continuity of discussion can be placed on the patient. One of the major contributions of Freudian psychology is that some behavior must be interpreted in terms of unconscious conflicts or complexes which are normally repressed and can be uncovered only through the methods of depth analysis   In his attempts to limit himself to neutral nondirective comments, the counselor frequently blocks the patient's continuity of expression when a more positive approach would probably uncover additional significant material

   On Advice and Counseling   From time immemorial people have gone to the wise men for information, advice, and clarification of their problems.   The dictionary defines counseling as to give advice or to recommend, as an act or course   The advice is usually critically evaluated by its receiver and then accepted or discarded according as it seems consistent or untrue on the basis of past experience. Even though advice may be verbally rejected at the moment that it is given, there is good evidence that it is usually assimilated and later acted upon after the shock of facing unpleasant reality has worn off.

   In commenting on his technique, Snyder explains his intention of refusing to give his client any advice (footnotes 10, 11, 12) because he feels it best for the client to work out his own solution to his problems   In footnote 45, Snyder states his belief that the client can be expected to reject completely the majority of directive or coercive

interpretations. Although admitting the validity of these conceptions in some situations, it may nevertheless be suggested that there' are also many situations where advice and counsel are not 'only extremely valuable but are gratefully accepted by the patient   Considering the fact that it probably takes many years to become a wise man (even though one has a doctorate in clinical psychology), the counselor who consistently finds his advice being rejected might well reflect upon his own powers to determine whether his advice is indeed valid and whether he is personally impressive enough to exert any real influence over the client

Suitability for Various Types of Patients   Rogers (4) has indicated the limitations of the nondirective method and emphasizes that the technique is most effective with essentially normal people who have enough personality integration to resolve their own problems with a minimum of direction from the counselor   It is less effective with patients who have lost personality integration to the degree that they are no longer capable of self-direction and rational thinking   The more serious psychiatric disorders require a more or less intensive manipulation of the patient's entire life situation, often in the face of intense resistance from the patient himself Even with disturbed patients, however, there are many clinical situations where the nondirective method may be utilized to fit the needs of the individual situation   The question is not so much whether the nondirective method is or is not applicable to different types of patients, but whether it should be used solely to the exclusion of other methods   Some doubt may be raised whether the treatment of Mr M might not have been more effective if a judicious combination of directive and nondirective techniques had been used   Snyder admits that Mr. M has a severe neurosis (footnote 29) and is perhaps overoptimistic concerning the permanent benefits to be expected from this short treatment (footnotes 74, 80)

Nondirective Methods Technique or System?   There is no question concerning the validity or applicability of nondirective methods in selected clinical situations   There is some question whether they are the complete and final answer to all problems of counseling to the degree that they constitute a new system or school of thought It usually requires a period of years before new contributions of methodology become evaluated and assimilated into the body of existing knowledge   It is unfortunate that too often these newer

methods are worked to death by enthusiastic converts as in the history of the psychoanalytic movement

Probably as the result of partisan adherence to currently popular schools of thought, there has arisen an attitude that education and therapy are matters of extreme delicacy and that the slightest error or deviation from the rule might result in grave damage   Human living is not as delicate and exacting a proposition as some assume. Children are not ruined for good inevitably by traumatic episodes early in life   Most people are singularly successful in spite of insuperable odds of stupidity and error   In fact most doctors admit that patients will get well in spite of anything they do for them It seems profitable to suggest that clinicians should desensitize themselves concerning the elaborate rituals which they come to feel are absolutely necessary for effective treatment   Most therapeutic methods are not precision instruments which must be administered according to a rigid technique in order to be successful   There is opportunity for the effective use of many methods with numerous variations in technique   Our regard should be focused on goals of therapy rather than on dogmatic adherence to specific methodology

SUMMARY

Nondirective methods of psychotherapy constitute a valuable new technical tool for use in appropriate clinical situations, but they are definitely not the complete answer to all therapeutic problems even in mild personality disorders   Nondirective methods will take their place along with older directive techniques in the therapeutic armamentarium and the clinician will learn to choose his method to fit the needs of the individual situation   It is gratifying to note that clinical psychology has at last made a noteworthy contribution consistent with trends in modern psychiatry.

BIBLIOGRAPHY

1 DIETHELM, O   *Treatment in psychiatry*   New York   Macmillan, 1933   Pp 111–133
2 LECKY, P   Unpublished doctoral dissertation, Columbia University, 1938
3 ROGERS, C R   *The clinical treatment of the problem child.*   Boston   Houghton Mifflin, 1939
4 ROGERS, C R   *Counselling and psychotherapy*   Boston   Houghton Mifflin, 1942
5 ROGERS, C R   Therapy in guidance clinics   This JOURNAL, 1943, 38, 284–289   •
6 SNYDER, W U   A short-term nondirective treatment of an adult   This JOURNAL, *Clin Suppl*, 1943, 38, 87–137

SHORT ARTICLES AND NOTES

INTELLIGENCE-TEST SCORES OF NORTHERN AND SOUTHERN WHITE AND NEGRO RECRUITS IN 1918

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Lᴀsᴛ sᴘʀɪɴɢ the pamphlet of Benedict and Weltfish, *The Races of Mankind* (2), achieved national attention when the Committee on Military Affairs of the House of Representatives in Congress found it "unfit for U S soldiers" and got it withdrawn from general circulation in the Army   The statement in the pamphlet that especially aroused the ire of certain Congressmen was to the effect that the intelligence of Negro recruits in three selected northern states had been shown, in the First World War, to be higher than the intelligence of white recruits in three other selected southern states   The Committee on Military Affairs protested that Benedict and Weltfish had prejudiced their findings in favor of the Negro by selecting those particular states which would permit this conclusion

Benedict and Weltfish had, of course, as had Klineberg before them (3), selected their states with a purpose   They wanted to show that score on an intelligence test is as much a function of geography as of skin color, that the differences in certain instances are due more to cultural advantages and disadvantages than to race, that the effects of geography and skin color on score may both be due to cultural influences, that for this reason being southern may be as great a disadvantage in attaining high scores on a test as being Negro   Most psychologists will agree with them in this matter, and few will assert that any unalterable racial differences in intelligence have ever been established, so great is the effect of culture upon intelligence test scores

It seemed to us, since this issue has been raised about the recruits of 1918, that it would be interesting to present the total picture of the Army scores, as neither Klineberg nor Benedict and Weltfish have done, rounding out the account by the inclusion of the scores of the southern Negroes and the northern whites, by the addition of the scores on the Beta examination to those on the Alpha examination, and by then performing an analysis of variance in respect of geography and skin color

Everyone knows that Negro recruits in both World Wars have scored much lower on intelligence tests than have white recruits, whenever the more obvious parameters besides skin color are kept constant   The data from the First World War (4, pp 705–742) showed that northern Negroes did much better on the tests than southern Negroes   Anastasi (1, pp 494 f) printed results for the Negro recruits on both the Alpha and Beta examinations, making it clear that Negroes in the North do better than Negroes in the South, but saying nothing about the comparison of the northern Negro with the southern white   Klineberg (3, pp 182 f) gave the results for the Alpha examination only for the whites of four southern states and the Negroes of four northern states, showing that the average score for the Negroes in each of these states was higher than the average for the whites in each of the southern states   Benedict and Weltfish (2, p 18) repeated Klineberg's results, making them a little more striking by omitting the northern state in which the

Negroes averaged lowest and the southern state in which the whites averaged highest That was fair enough, since they wanted to show that the difference usually found can be reversed when extreme instances are selected We chose for study in this note Klineberg's four states, since Klineberg's results have been so widely quoted They are named in the legend of Table 1

TABLE 1

AVERAGE INTELLIGENCE-TEST SCORES OF 26,894 NORTHERN AND SOUTHERN WHITE AND NEGRO RECRUITS IN THE FIRST WORLD WAR

Entries are in terms of the Combined Scale, which combines the scores from the Alpha and Beta examinations and gives figures not wholly unlike mental ages Northern states Illinois, New York, Ohio, Pennsylvania Southern states Arkansas, Georgia, Kentucky, Mississippi SD standard deviations of the distributions N number of cases The raw data from which these entries are derived are to be found in (4), white recruits in Alpha, Table 200, pp 682f , white recruits in Beta, Table 201, pp 683f , Negro recruits in Alpha, Table 262, p 728, Negro recruits in Beta, Table 264, p 729 The regressions from Alpha and Beta to the Combined Scale are given in (4), Table 159, p 642, and Table 162, p 644

			SKIN COLOR	
			NEGRO	WHITE
Geography	Southern	Av SD N	9 8 1 82 5425	12 7 2 41 3904
	Northern	Av SD N	12 0 2 41 4455	14 1 2 60 13110

We have also combined the scores of the Beta examination with the scores of the Alpha examination by the method described by Carl R Brown (4, pp 573–657) This gives us scores in terms of his Combined Scale, with values that are not wholly unlike mental ages in their magnitudes We thought that the inclusion of the Beta scores ought to give the Negroes some advantage that they did not have when Alpha scores were used alone Beta was given to all men who scored low on Alpha, because they were either stupid or unable to read English All illiterates, English speaking and non-English speaking, therefore, took Beta Its instructions were given in pantomime and it required no reading It was obviously not culture-free, for some of the more difficult items depended on a good deal of sophistication Our results show that these Negroes were not advantaged by Beta, relative to the whites

It ought to be said that the Army psychologists of 1919 were not ready to draw any conclusions at all about the relative intelligence of the recruits from different states (4, pp 681–692, 705–742) There were too many unknown factors operating in the selection of these samples The psychologists printed the data for what they were worth and left interpretation to the future

The primary results on the Alpha and Beta examinations for northern and southern white and Negro recruits in terms of Brown's Combined Score appear in Table 1. They are what one might expect from what is already known It was a disadvantage in the Army tests of 1918 for a white or a Negro to come from a

southern state where education and economic opportunities are few instead of
from a northern state where they are better, and also a disadvantage, whether
northern or southern, to be Negro and not white   Thus the average score for the
southern Negroes is lowest of the four because southern Negroes work against both
these disadvantages, and the average score for the northern whites is, conversely,
highest of all   Benedict and Weltfish might have avoided the criticism of selection
of states had they given all four of these averages instead of only two, for then they
would have avoided the false implication that skin color made no difference in the
states under consideration

TABLE 2

ANALYSIS OF VARIANCE OF THE DATA OF TABLE 1

"Interaction" is the additional variance due to the fact that the effect of skin color
reenforces the effect of geography   Variance "within group" is the variance that still
remains unexplained after the separate effects of skin color and geography and the effect
of their mutual interaction have been analyzed out   The three F-values are so much more
significant than 1 chance in 1,000 of their being random that they lie nowhere near the
entries of the published tables

SOURCE OF VARIANCE	DEGREES OF FREEDOM	SUM OF SQUARES	MEAN SQUARE	F
Total	26,893	203,776		
Skin Color	1	32,812	32,812	5,697
Geography	1	17,010	17,010	2,953
Interaction	1	840	840	146
Within Group	26,890	153,114	5 76	

Table 2 adds the results of an analysis of variance for the data of Table 1   It
shows that both skin color and geography affect the scores, that skin color has more
effect than geography in this instance, that the two factors interact to enhance each
other, and that the differences are very highly significant

TABLE 3

SIZE OF SAMPLES

NUMBERS OF MEN WHO TOOK THE ALPHA AND BETA EXAMINATIONS, AND THE TOTALS, FOR THE DATA OF TABLE 1

	NEGRO RECRUITS			WHITE RECRUITS			TOTALS		
	Alpha	Beta	Total	Alpha	Beta	Total	Alpha	Beta	Total
Southern	1,456	3,969	5,425	2,817	1,087	3,904	4,273	5,056	9,329
Northern	2,538	1,917	4,455	10,306	2,804	13,110	12,844	4,721	17,565
Total	3,994	5,886	9,880	13,123	3,891	17,014	17,117	9,777	26,894

Tables 3 and 4 show that very many more Negroes than whites took the Beta
examination and that the number of men who took Beta in a sample is a rough
prediction of how low the average score on the Combined Scale will be   That

TABLE 4

PERCENTAGES OF RECRUITS TAKING THE BETA EXAMINATION, DERIVED FROM TABLE 3

	NEGRO	WHITE	TOTAL
Southern	73 2	27 8	54 2
Northern	43 0	21 4	26 9
Total	59 6	22 9	36 3

might, of course, be due ˌto the fact that low intelligence sent many men to Beta, but certainly the Army psychologists of 1918 believed that the chief cause of being sent to Beta was illiteracy   In respect of the huge difference in these tables, Alpha might almost be considered as a literacy test

It is interesting to note in Table 1 that the average score on the Combined Scale for northern Negroes is not quite as high as it was for the southern whites   Since the direction of this difference reverses the direction for the Alpha scores as reported by Klineberg and by Benedict and Weltfish, it appears that the inclusion of the scores from the Beta examination, while they undoubtedly helped the Negroes, helped the whites more   Our only suggestion in explanation of this fact is that Beta is less culture-free than even we had supposed, that Beta is better adapted to whites than to Negroes   Thus the 23 per cent of the southern whites that took Beta raised the average score for southern whites more than the 43 per cent of northern Negroes raised the average score for northern Negroes   Of course, it is possible to say that Beta overcomes illiteracy more than stupidity, and that the proportion of Negroes who went to Beta because of stupidity was greater than the proportion of whites who went for stupidity, a conclusion fully consistent with the common prejudice about the low level of Negro intelligence   We should not, however, wish to draw this conclusion in view of the fact that cultural differences are known to have such a large effect on test scores

In general, then, we think that Benedict and Weltfish were right about the importance of culture, or at least not demonstrably wrong, but we also think that they should have presented more complete data   They would have strengthened their case had they but shown clearly that skin color as well as geography did affect the test scores of the recruits in 1918, and had they then gone on, as they did, to argue that it is the Negro's educational disadvantages and not actually his color which handicaps him in these tests

REFERENCES

1 ANASTASI, A   Differential psychology   New York   Macmillan, 1937
2 BENEDICT, R , & WELTFISH, G   The races of mankind   Public Affairs Pamphlet No 85   Public Affairs Committee, 1943
3 KLINEBERG, O   Race differences   New York   Harper, 1935.
4 YERKES, R M   (Ed)   Psychological examining in the United States Army   Mem nat Acad Sci , Wash , 1921, 15   Pp 890

HOMOGAMY IN PERSONALITY CHARACTERISTICS

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T HE findings of almost all studies of assortative mating confirm the hypothesis of homogamy, namely, that there exists a tendency for "like to mate with like" [1]   More specifically these studies indicate that the "affinity of like for like" exerts a greater influence in marital selection than the "attraction of opposites for each other "

Evidence of the predominance of the tendency of marriage between "similars" over that between "opposites" has been presented for physical, social, cognitive, and personality characteristics   The findings of research on homogamy in personality characteristics, however, are somewhat inconclusive because of a methodological inadequacy in that the subjects of study have been married couples [2]   Accordingly no control has been exercised over the possible influence of marital association on the convergence or divergence of their characteristics [3]   Unless the traits investigated are relatively constant the findings of these studies must be regarded as imperfect and insufficient evidence for the hypothesis of homogamy in personality characteristics   And in the light of current knowledge the assumption of unchangeability of all personality attributes hardly seems warranted [4]

The data on homogamy in personality characteristics presented here were secured from one thousand engaged couples   The findings obtained are of value in and of themselves, they are also a partial check on the direction, if not the magnitude, of the findings of studies of assortative mating using married couples as their subjects [5]

The engaged couples when studied [6] resided in the Chicago metropolitan region They are all of the white race, three-fifths with both parents native-born   Their age range was almost entirely between twenty and thirty   Three-fourths of the young men and not quite two-thirds of their fiancées were at the college level of education, the remainder were nearly all high-school graduates   Approximately

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[1] See E W Burgess and Paul Wallin, Homogamy in social characteristics, *Amer J Sociol* , 1943, 49, 109–24

[2] An exception is E L Kelly's study of engaged couples   See "Personality factors in assortative mating," *Psychol Bull* , 1940, 37, 576, for an abstract of his findings

[3] This weakness is also inherent in studies of resemblance between husbands and wives in alterable characteristics such as attitudes, opinions, etc , as a measure of homogamy

[4] One investigation reports an increase of husband-wife similarity in neurotic tendency with increase in number of years married   M Schooley, Personality resemblances among married couples   This JOURNAL, 1936, 31, 340–47

[5] Ideally, of course, couples should be studied before they meet, thus ruling out the possible effect of their experience with each other subsequent to the initiation of their relationship

[6] This is part of a larger study of engagement and marriage being carried on by the writers

one-half are Protestants   The large majority are of the middle and upper middle class

_ Two series of personality data were obtained from these subjects   The first consists of their responses to the 42 [7] questions in the Thurstone Neurotic Inventory [8] which are most discriminating in differentiating between persons who rank high and low on neuroticism [9]

The second series of data, available for only 316 of the 1,000 couples, consists of self-ratings on 23 selected personality traits [10]   These traits recurred in spontaneous descriptions of themselves which many couples offered when interviewed [11]   They were then listed on a mimeographed sheet and the subjects were asked to rate themselves on each trait in terms of a five-point scale [12]

Data will also be presented on assortative mating with respect to height, weight, state of health, complexion, and physical appearance

THURSTONE NEUROTIC INVENTORY

The responses of the engaged couples to the individual items of the inventory and their total neurotic scores conform in general with the theory of homogamy that marriages tend to take place between persons of certain similar personality characteristics

On all but one [13] of the 42 questions there is a greater actual than expected similarity in the responses of the members of the couples, i e, the actual percentage of couples both members of which give the same response is greater than would be expected on the basis of chance alone   For example, on the first item of Table 1, "Do you daydream frequently?" the "percentage the same" expected by chance is 48 1, whereas the "actual percentage the same" is 56 5, a statistically significant difference   The differences are significant, however, only for 14 of the questions [14]   These are shown in Table 1 along with the data for total neurotic score which also indicate a small but statistically reliable disposition for "like to mate with like"

In an attempt to determine whether there was any patterning of the inventory questions in relation to homogamy use was made of Mosier's factor analysis of the 42 items into eight factors [15]   The total neurotic scores on these eight factors were obtained for the men and the women comprising the 1,000 engaged couples and then correlated with the following results   autistic tendency, 21 ± 03, cycloid

[7] These questions constituted part of the eight-page schedule used in the larger study The schedules were filled out independently by the men and women of the couples   Thirty-five per cent of the former and 39 per cent of the latter participated anonymously

[8] See L L Thurstone and T G Thurstone, A Neurotic Inventory, J soc Psychol, 1930, I, 3–30

[9] The Neurotic Inventory is so scored that the higher the score the more neurotic the person is supposed to be

[10] These self-ratings were obtained from only a part of the sample because the decision to ask for them was made after the majority of the subjects had already sent in their schedules

[11] The purpose of the interviews was to supplement the information obtained from the schedules

[12] Hereafter these will be referred to as the rating-sheet traits to distinguish them from the responses to the Thurstone Inventory questions which are also self-ratings

[13] "Is it difficult to move you to tears?"   The proportion of similar responses expected by chance was 39 6 per cent, whereas the obtained proportion is 38 2 per cent   This is not a statistically significant difference

[14] The remaining 28 questions did not yield reliable deviations from chance in the proportion of men and women who answered them identically

[15] C I Mosier, A factor analysis of certain neurotic symptoms, Psychometrika, 1937, 2, 263–286, lists the items included in each of the factors

reaction, 19 ± 03, depression, 18 ± 03, cognitive factor, 17 ± 03, hypersensitivity, 15 ± 03, inferiority, 12 ± 03, social introversion, 11 ± 03, platform self-conscious-ness, 11 ± 03

TABLE I

SIMILARITY OF MEMBERS OF ENGAGED COUPLES IN TOTAL NEUROTIC SCORE AND IN
FOURTEEN NEUROTIC INVENTORY ITEMS STATISTICALLY
SIGNIFICANT * FOR HOMOGAMY

PERSONALITY ITEM	No OF COUPLES	PERCENTAGE THE SAME EXPECTED ACTUAL		RATIO OF ACTUAL TO EXPECTED	C **
Neurotic Score	1,000	26 5	30 0	I 13	23 ¶
Do you daydream frequently? †	993 ‖	48 1	56 5	I 17	19
Are you frequently burdened by a sense of remorse?	992	60 7	66 5	I 10	18
Are you sometimes the leader at social affairs?	994	53 3	58 9	I 11	17
Does some particular useless thought keep coming into your mind to bother you?	994	70 1	73 9	I 05	17
Do you usually feel that you are well-dressed and make a good appearance?	996	74 2	77 4	I 04	17
Are you touchy on various subjects?	995	48 3	55 1	I 14	16
Do you feel that you must do a thing over several times before you leave it?	993	56 4	62 0	I 10	16
Are your feelings easily hurt?	997	44 8	50 8	I 13	14
Do you often experience periods of loneliness?	994	53 5	59 1	I 10	14
Do ideas often run through your head so you cannot sleep?	994	51 8	56 2	I 09	14
Do your interests change quickly?	996	60 3	64 5	I 07	13
Do you often feel just miserable?	1,000	63 9	67 9	I 06	13
When you were in school did you hesitate to volunteer in a class recitation?	994	49 7	51 8	I 04	13
Do you get stage fright?	997	47 3	52 2	1.10	12

* The probability that the differences in this table between the actual and expected percentages of similar responses are chance differences is 01 or less

† All questions could be answered "yes," "no," or "? "

‖ The total number of cases is less than 1,000 on all but one item because some questions were left unanswered by a number of subjects

¶ The class intervals used in calculating the C for this item were 0–7, 8–14, 15–21, 22–28, 29 and over The maximum value of C for a five-by-five table is 894

** C, the coefficient of mean square contingency, is a measure of the extent of association between the responses of the men and women of the couples. The higher the value of C, the greater is the degree of homogamy The maximum value of C for a 3×3 table is 816 See G U Yule and M G Kendall, *An introduction to the theory of statistics,* London, 1937, p 69

All of these correlations are statistically significant, indicating homogamous selection in these eight components of personality   The differences between the correlations obtained for the majority of the factors are not statistically significant The differences probably are greater than chance,[16] however, between "autistic tendency" and both "social introversion" and "platform self-consciousness "

SELF-RATINGS OF PERSONALITY TRAITS

On 9 of the 23 traits listed on the self-rating sheets similar self-ratings were obtained from a significantly greater proportion of couples than could have been expected on a chance basis   These data are shown in Table 2

TABLE 2

SIMILARITY OF MEMBERS OF ENGAGED COUPLES ON NINE RATING-SHEET TRAITS
STATISTICALLY SIGNIFICANT FOR HOMOGAMY

PERSONALITY TRAIT *	No OF COUPLES	PERCENTAGE THE SAME		RATIO OF ACTUAL TO EXPECTED†	C
		EXPECTED	ACTUAL		
Jealous	316	36 7	47 2	1 29	27
Easily excited	240 ‖	36 3	45 4	1 25	27
Easily influenced by others	316	34 5	37 3	1 08	23
Moody	316	37 0	44 0	1 19	22
Stubborn	316	33 5	43 0	1 28	21
Unselfish	316	33 9	43 0	1 27	21
Selfish	316	33 2	39 9	1 20	21
Dominating	316	39 6	48 4	1 22	20
Like belonging to organizations	316	34 5	41 5	1 20	20

* Subjects rated themselves by checking one of the following categories for each trait have the trait, markedly, considerably, somewhat, a little, not at all   In calculating C it was necessary to combine some of the categories in order not to have too few cases in any single category   A three-by-three table was used in obtaining C
† The probability that the differences in this table between the actual and the expected percentages of similar responses are chance differences is only one or less in a hundred
‖ Only 240 cases because this item was added to the rating sheet after it had been in use a short time

Of the 14 statistically nonreliable differences, 12 [17] are in the direction of homogamy, which is strongly suggestive evidence for the tendency of like to mate with like in regard to these characteristics   At any rate, we are justified in concluding that the findings for the rating sheet, like those of the Neurotic Inventory, strengthen the case for the homogamy hypothesis

Our findings on personality traits are consistent with those of other investigators   Kelly, whose data have not yet been reported in detail, secured ratings from five judges on 36 personality traits of three hundred engaged couples and concluded that his analysis supports the theory of homogamy [18]   Since all other studies were

[16] The CR of the difference between the correlations for autistic tendency and social introversion is 2 6
[17] These 12 traits are irritation, sense of humor, easily depressed, make up mind slowly, act impulsively, easygoing, aggressive, easily hurt, assume responsibility willingly, sense of duty, make friends quickly, care what people say and think   The two other traits were "get angry easily" and "get over anger quickly "
[18] Op cit.

of married couples our results are not strictly comparable The findings of our study of engaged couples, however, taken in conjunction with Kelly's, can be looked upon as a partial confirmation of the studies of married couples since the findings of almost all of the latter are in support of the homogamy hypothesis [19] It may, therefore, be inferred that the influence of the common experiences of couples in marriage does not account entirely, if at all, for the fact of similarity in their personality attributes The explanation in part, at least, is to be found in homogamy

PHYSICAL CHARACTERISTICS

That physical attributes such as height and weight play a part in marital selection has long been established The findings from the study of engaged couples presented in Table 3 contribute to the evidence of previous studies on homogamy in height and weight and add to the evidence of homogamy in health and appearance

TABLE 3

SIMILARITY OF MEMBERS OF ENGAGED COUPLES IN PHYSICAL CHARACTERISTICS

CHARACTERISTIC	NO OF CASES MEN	NO OF CASES WOMEN	PERCENTAGE THE SAME EXPECTED	PERCENTAGE THE SAME ACTUAL	RATIO OF ACTUAL TO EXPECTED	C
Height *	989	989				(r= 31± 03)*
Weight *	984	984				(r= 21± 03)*
Present state of health	987	987	38 7	45 3	1 17	20
Average, poor, bad	184	251	4 8	6 5		
Healthy	526	508	27 4	28 9		
Very healthy	277	228	6 5	9 9		
Complexion	994	994	37 4	40 9	1 09	08
Blonde	189	171	3 3	4 0		
Brunette	448	479	21 7	23 3		
In-between	357	344	12 4	13 6		
Physical appearance of self	991	991	40 5	48 5	1 20	20
Very good and good-looking	313	443	14 1	17 9		
Fairly good-looking	497	504	25 6	28 8		
Plain and very plain	181	44	8	1 8		
Physical appearance of fiancé(e)	993	993	38 7	44 7	1 16	19
Very good-looking	234	115	2 7	4 2		
Good-looking	559	499	28 3	29 6		
Fair, plain, and very plain	200	379	7 7	10 9		

* Pearsonian coefficients of correlation were calculated for these variable

The 31 and 21 correlations for height and weight respectively indicate a tendency for persons to mate with others whose height and weight approximate their own These findings are consistent with those of other studies Pearson found a corre-

[19] See, for example, Schooley, *op cit*, R Willoughby, Neuroticism in marriage IV, Homogamy, *J soc Psychol*, 1936, **7**, 19–48, E Hoffeditz, Family resemblances in personality traits, *J Psychol*, 1934, **5**, 214–227

lation for height of 30 in a sample of the British middle class [20] Schiller reported a correlation of 36 for height and 32 for weight in a rather homogeneous group of Jewish couples [21] And Schooley obtained a correlation of 24 for height and 27 for weight in a series of couples drawn from a college and industrial town [22]

Relatively few studies have been made of assortative mating with regard to health Our finding is that health is a factor in mate selection, the tendency being for the very healthy, the healthy, and those of poorer health to seek in marriage persons whose health is similar to their own [23]

Our data offer support neither for homogamy nor heterogamy in complexion While the number of unions of blondes, of brunettes, and "in-betweens" with their kind is slightly greater than chance expectation, the excess is not significant

Finally, there is a tendency to marriage between persons of equivalent physical attractiveness   The "good-looking" are drawn to the "good-looking," and the "plain-looking" mate with each other   The validity of the self-ratings on physical attractiveness is supported by the fact that essentially the same finding is obtained when the ratings made of each other's appearance by the members of the couple are used [24] Another investigator obtained a correlation of 41 between the appearance of husbands and wives as rated by three judges [25]

SUMMARY AND CONCLUSION

The findings of this report are important for research on homogamy in personality characteristics because they are based on data obtained from engaged couples   Unlike the findings derived from studies of married couples, they are not subject to the criticism that they may reflect the influence of marital experiences rather than the operation of personality characteristics in marital selection

Our findings are consistent with the hypothesis of homogamy in regard both to neurotic tendency (as indicated by total score on an abbreviated version of the Thurstone Neurotic Inventory) and to individual items comprising it   Fourteen of the items were statistically significant and a number of others approximated the standard of significance used   Moreover, the distribution of responses on all but one of the 42 items studied was in the direction of homogamy

The findings obtained from a self-rating scale of 23 personality traits devised by the writers lend added support to the theory of homogamy   Nine traits were statistically significant and the distribution of the responses on all but two of the others was in the direction of homogamy

Homogamy was also indicated for height, weight, health, and physical attractiveness but not for complexion

In conclusion, it is interesting that the one thousand engaged couples give evidence of a lesser degree of homogamy in personality characteristics than in religious

[20] K Pearson and A Lee, On the laws of inheritance in man *Biometrika*, 1903, 2, 373
[21] B Schiller, A quantitative analysis of marriage selection in a small group *J soc Psychol* , 1932, 3, 297–318
[22] M Schooley, *op cit* , p. 343
[23] This conclusion was also reached by E M Elderton, "Studies in deterioration," Appendix II in E G, Pope, *A second study of the status of pulmonary tuberculosis, Draper's Co Research Memoirs*, 1908, 3, 31
[24] Moreover, a recent study reports on average correlation of 54 between self-ratings of appearance and the judgment of an observer   This correlation is the average of correlations obtained for two groups of male subjects and two groups of females   See R. F Winch, Social and personality characteristics of courtship revealed in college men, unpublished Ph.D dissertation, University of Chicago, 1942
[25] Schooley, *op. cit* , p 343

affiliation and behavior, cultural backgrounds, courtship behavior, conceptions of marriage, and social participation [26] Upon the basis of present evidence "cultural likeness" appears more important than "temperamental or personality similarity" in marital selection This is perhaps to be expected both because of the segregation of young people in religious, social-class, and nationality groups and the pressure by parents and friends to marry within these circles

[26] The findings of homogamy in these factors are reported in another paper by the writers, "Homogamy in social characteristics," *Amer J Sociol*, 1943, 49, 109–124 The average correlation of all personality items studied is 13 (or 18 for those statistically significant) as compared with 54 for religious affiliation and behavior, 38 for family cultural background, 33 for courtship behavior, 31 for conceptions of marriage, and 24 for social participation It should however be noted that the C for total neurotic score is 23

IDENTIFICATION OF OCCUPATIONAL GROUPS WITH ECONOMIC AND SOCIAL CLASS

BY J M WALLACE, JR, F W WILLIAMS, AND HADLEY CANTRIL

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IN a previous article in this JOURNAL, it was reported that an overwhelming proportion of the American people identify themselves with the great middle class It was also pointed out that when individuals were asked to place themselves in both a social and an economic class, the two identifications were by no means always the same—the tendency was for people to rate themselves higher in social class than in economic class [1]

It seemed reasonable to suppose that certain significant differences in class identification might appear within various occupational groups So the same data used in the earlier study were broken down by eight occupational categories As before, 3114 complete interviews were analyzed The questions asked (June 1941) were

Which income group in our country do you feel that you are a member of—the middle income group, the upper income group, or the lower income group?

| Upper | Upper Middle | Middle | Lower Middle | Lower |

To what social class in this country do you feel you belong—middle class, or upper, or lower?

| Upper | Upper Middle | Middle | Lower Middle | Lower |

Persons were classified into occupational groups according to the type of income-producing work performed by the breadwinner of the family Hence, the "housewife" category was eliminated In addition to straight breakdowns by occupation, the influence of other factors such as age, sex, and car ownership was studied while keeping occupation a constant in the tabulations

RESULTS AND CONCLUSIONS

1 *A majority of the American people within each of the eight occupational groups identify themselves with the middle social class*
   a Nearly nine out of every ten business executives, white collar, or skilled workers, farmers, or professional people think of themselves as members of the middle social class (Table 1)
   b Five out of six of the semi-skilled, unskilled workers, or servants make the same identification (Table 1)
2 *The income identification of various occupational groups follows the expected progression from unskilled workers to business executives*
   a Only about four out of ten unskilled workers place themselves in a middle income category, the rest say they are lower income (Table 1)
   b Nine out of ten business executives believe they belong in the middle income group (Table 1)
3 *There is more ego involvement in maintaining a relatively high social identification than a high economic identification Social status, unsupported by income, is most pronounced in the "lower" occupational groups, among certain older workers, and among relatively upper class women.*

[1] Cantril, H Identification with social and economic class This JOURNAL, 1943, 38, 74–80

TABLE 1

SOCIAL AND INCOME CLASS IDENTIFICATION AMONG EIGHT OCCUPATIONAL GROUPS

(PERCENTAGES)

	UPPER		UPPER MIDDLE		MIDDLE		LOWER MIDDLE		LOWER		TOTAL CASES	
	S	I	S	I	S	I	S	I	S	I	S	I
Business executive	7 2	3 3	18 8	16 7	67 7	56 0	5 3	15 6	1 0	8 4	527	583
Professional	10 9	4 6	29 8	19 7	55 5	51 1	2 3	14 6	1 5	10 0	350	370
White collar	5 2	1 1	12 0	4 5	72 0	47 1	8 1	28 7	2 7	18 6	749	794
Farm	5 8	1 0	9 6	5 0	68 0	42 3	11 4	30 0	5 2	21 7	926	939
Skilled worker	5 1	0 7	7 2	4 2	71 0	45 0	11 2	21 0	5 5	29 1	449	434
Semi skilled worker	2 9	0 2	4 3	2 2	63 0	35 0	14 8	27 0	15 0	35 6	445	456
Unskilled worker	4 8	0 2	2 3	0 9	58 6	20 0	17 8	23 4	16 5	55 5	394	430
Servant			3 8		57 5	20 6	21 7	26 2	17 0	53 2	106	107
Total All Groups	5 7	1 4	11 3	6 9	66 3	42 6	10 4	24 2	6 3	24 9	3,946	4,113

TABLE 2

SOCIAL AND INCOME CLASS IDENTIFICATION OF MEN AND WOMEN IN EIGHT OCCUPATIONAL GROUPS

(PERCENTAGES)

	UPPER		UPPER MIDDLE		MIDDLE		LOWER MIDDLE		LOWER		TOTAL CASES	
	S	I	S	I	S	I	S	I	S	I	S	I
Men												
Business executive	7 3	3 1	15 4	15 1	70 4	55 5	5 8	17 4	1 1	8 9	357	391
Professional	13 8	5 8	27 0	21 7	55 5	50 5	2 1	12 8	1 6	9 2	189	212
White collar	4 7	1 7	10 6	3 9	72 0	44 0	9 6	30 2	3 1	20 2	387	413
Farm	6 1	1 0	8 9	4 8	69 0	40 5	10 8	31 1	5 2	22 6	610	621
Skilled worker	5 3	1 1	5 6	4 7	69 0	40 9	12 8	23 0	7 3	30 3	304	296
Semi skilled worker	2 6	0 4	2 0	2 5	63 6	39 2	14 0	22 8	17 8	35 1	231	237
Unskilled worker	3 5		1 9	1 1	61 6	17 4	16 5	23 8	16 5	57 7	260	282
Servant			4 5		50 0	15 5	20 5	37 8	25 0	46 7	44	45
Total Men	5 8	1 7	9 7	7 0	66 9	41 1	10 5	25 0	7 1	25 2	2,382	2,497
Women												
Business executive	7 0	3 6	25 8	19 8	62 4	57 4	4 2	12 0	0 6	7 2	170	192
Professional	7 5	3 2	33 0	17 1	55 2	52 0	2 5	17 1	1 8	10 6	161	158
White collar	5 8	0 5	13 5	5 3	73 2	50 4	6 4	27 0	1 1	8 6	362	381
Farm	5 7	0 9	10 8	5 4	66 0	46 0	12 4	27 4	5 1	20 3	316	318
Skilled worker	4 8		10 3	2 9	74 5	54 4	7 6	16 7	2 8	26 0	145	138
Semi skilled worker	3 3		6 6	1 8	62 2	30 6	15 9	31 5	12 0	36 1	214	219
Unskilled worker	7 5	0 7	3 0	0 7	54 5	25 0	20 1	22 3	14 9	51 3	134	148
Servant			3 3		63 0	24 1	22 4	17 8	11 3	58 1	62	62
Total Women	5 6	1 1	13 6	6 9	65 4	44 8	10 2	23 3	5 2	23 9	1,564	1,616

a We find a marked tendency for persons in each occupational group to rate their social class higher than their income class (Table 1)

b The more lowly a person's occupation, in terms of the commonly accepted norms of our culture, the less likely is his social identification to be bolstered by a corresponding economic placement (Table 1)

c Among older skilled and semi-skilled workers there is a more marked tendency than among younger workers to rate social class higher than income class (Table 3)

TABLE 3

SOCIAL AND INCOME CLASS IDENTIFICATION OF THOSE UNDER 40 YEARS OLD AND THOSE 40 YEARS OR OLDER IN EIGHT OCCUPATIONAL GROUPS

(PERCENTAGES)

	UPPER		UPPER MIDDLE		MIDDLE		LOWER MIDDLE		LOWER		TOTAL CASES	
	S	I	S	I	S	I	S	I	S	I	S	I
Under 40												
Business executive	4 6	1 0	13 3	11 3	76 5	61 2	4 1	18 2	1 5	8 3	196	204
Professional	9 9	3 5	28 8	16 2	56 4	52 6	3 3	16 2	1 6	11 5	181	173
White collar	4 9	0 4	11 6	4 6	73 6	47 8	8 0	29 6	1 9	17 6	475	520
Farm	3 6	0 6	8 5	2 4	73 0	44 8	10 3	29 6	4 6	22 6	330	332
Skilled worker	3 6	1 1	8 6	3 9	75 0	56 0	7 6	19 2	5 2	19 8	197	182
Semi skilled worker	1 3		3 6	1 7	65 0	40 9	17 1	29 6	13 0	27 8	223	230
Unskilled worker	5 2		3 1	1 5	61 8	23 2	18 0	26 3	11 9	49 0	194	190
Servant			2 1		56 2	16 3	27 1	32 6	14 6	51 1	48	49
Total Under 40	4 4	0 7	10 5	5 2	69 6	45 8	10 1	25 9	5 4	22 4	1,844	1,880
40 and Over												
Business executive	8 9	4 3	22 5	19 9	62 5	53 2	5 5	14 3	0 6	8 3	325	372
Professional	12 1	5 7	30 7	22 3	54 2	49 7	1 2	13 5	1 8	8 8	166	193
White collar	6 2	2 3	13 1	4 3	70 8	46 0	7 7	27 3	2 2	20 1	260	257
Farm	7 0	1 2	9 9	6 4	65 2	40 6	12 3	30 2	5 6	21 6	585	596
Skilled worker	6 1	0 4	6 1	4 5	68 0	37 3	13 7	21 8	6 1	36 0	246	244
Semi skilled worker	4 7	0 5	5 1	1 8	59 6	28 8	13 1	25 1	17 5	43 8	215	219
Unskilled worker	4 6	0 4	1 5	0 4	56 1	17 8	17 9	20 8	19 9	60 6	196	236
Servant			5 3		59 7	24 1	15 7	20 7	19 3	55 2	57	58
Total 40 and Over	6 8	2 0	12 1	8 4	63 3	39 7	10 7	22 9	7 1	27 0	2,050	2,175

TABLE 4

SOCIAL AND INCOME IDENTIFICATION OF CAR OWNERS AND NON-OWNERS IN EIGHT OCCUPATIONAL GROUPS

(PERCENTAGES)

	UPPER		UPPER MIDDLE		MIDDLE		LOWER MIDDLE		LOWER		TOTAL CASES	
	S	I	S	I	S	I	S	I	S	I	S	I
Car Owners												
Business executive	7 3	3 6	19 7	17 7	68 6	60 4	3 7	13 0	0 7	5 3	438	469
Professional	9 7	5 6	33 0	26 3	54 5	51 0	2 0	12 3	0 8	4 8	246	251
White collar	6 3	1 5	15 5	6 3	72 8	56 0	4 4	25 7	1 0	10 5	382	412
Farm	6 0	1 0	11 0	6 8	70 4	48 5	8 8	28 2	3 8	15 5	635	621
Skilled worker	5 2	0 9	8 9	6 1	73 5	52 5	10 8	21 4	1 6	19 1	249	229
Semi skilled worker	3 0		3 6	3 0	71 4	49 7	13 7	28 8	8 3	18 5	168	167
Unskilled worker	4 2	.	4 2	0 9	71 5	25 9	11 7	31 5	8 4	41 7	119	108
Servant			5 9		76 5	41 2	5 9	29 4	11 7	29 4	17	17
Total Owners	6 3	2 0	14 7	10 4	69 2	52 0	7 0	22 4	2 8	13 2	2,254	2,274
Non Owners												
Business executive	8 0	2 3	10 7	6 9	62 7	39 1	16 0	25 3	2 6	26 4	75	87
Professional	12 9	1 0	21 5	6 3	58 1	51 6	3 2	17 9	4 3	23 2	93	95
White collar	3 0	0 3	8 4	2 5	73 3	36 5	12 3	33 0	3 0	27 7	333	340
Farm	5.7	0 7	6 2	2 5	62 4	28 6	16 9	33 9	8 8	34 3	261	283
Skilled worker	4 8	0 5	5 4	1 7	65 6	34 3	12 4	21 0	11 8	42 5	186	181
Semi skilled worker	2.7	.	4 3	2 0	57 4	26 7	15 6	24 3	20 0	47 0	256	255
Unskilled worker	5 6	0 3	1 6	1 0	55 7	19 0	19 0	21 4	18 1	58 3	248	290
Servant	.		2 4		54 3	18 3	25 3	25 6	18 0	56 1	83	82
Total Non-Owners	4 8	0 5	6,5	2.4	62 5	30 2	15 0	26 7	11 2	40 2	1,535	1,613

d There is a tendency for women in the upper levels to claim more social prestige than men through their own or their husband's occupations (Table 2)

4 *Failure to possess certain symbols (car and telephone) commonly associated with "success" widens the discrepancy between income and social identification among persons who are "above" the category of semi-skilled workers*

a The ownership of an automobile narrows considerably the gap between social and income identification among business executives (Table 4)

b Business executives, professional, white collar, skilled workers who have no telephone show much greater differences between the two identifications than do members of these same groups who do have telephones (Table 5)

TABLE 5

SOCIAL AND INCOME IDENTIFICATION OF THOSE WHO POSSESS HOME TELEPHONES AND THOSE WHO DO NOT IN EIGHT OCCUPATIONAL GROUPS

(PERCENTAGES)

	UPPER		UPPER MIDDLE		MIDDLE		LOWER MIDDLE		LOWER		TOTAL CASES	
	S	I	S	I	S	I	S	I	S	I	S	I
Telephone Possessors												
Business executive	8 0	4 0	20 0	18 7	68 0	60 0	3 3	11 6	0 7	5 7	425	475
Professional	10 6	5 5	31 5	24 0	55 3	53 2	1 1	12 2	1 5	5 1	273	271
White collar	6 3	1 6	16 6	7 0	70 0	56 7	5 9	24 8	1 2	9 9	427	443
Farm	6 7	1 3	10 4	8 1	74 2	54 3	7 4	28 8	1 3	7 5	376	396
Skilled worker	5 1	0 5	11 6	6 9	73 2	59 3	8 6	17 5	1 5	15 8	198	189
Semi skilled worker	5 6	0 8	8 8	4 0	70 5	43 5	8 8	29 8	6 3	21 9	125	124
Unskilled	4 7		4 6		75 6	33 3	12 8	33 4	2 3	33 0	86	78
Servant			5 6		72 1	33.3	5 6	33 4	16 7	33 3	18	18
Total	7 1	2 4	16 6	11 8	68 9	54 8	5 7	20 8	1 7	10 2	1,928	1,994
No Telephone												
Business executive	4 0		13 2	3 3	68 6	39 7	12 2	34 0	2 0	23 0	99	91
Professional	10 8	1 2	24 3	8 3	55 4	45 3	6 8	20 2	2 7	25 0	74	84
White collar	3 8	0 3	6 0	1 2	75 7	35 8	11 0	33 6	3 5	29 1	318	321
Farm	5 5	0 6	9 0	2 8	63 7	33 3	13 9	30 8	7 9	32 5	547	532
Skilled worker	5 3	0 9	3 6	1 7	68 8	34 0	13 0	24 2	9 3	39 2	247	232
Semi skilled worker	1 9		2 5	1 6	60 4	32 8	17 5	26 2	17 7	39 4	315	314
Unskilled worker	5 0	0 3	1 7	1 2	54 3	17 1	19 0	21 0	20 0	60 4	300	339
Servant			3 4		54 5	18 4	25 0	25 3	17 1	56 3	88	87
Total	4 4	0 4	6 2	2 1	63 9	31 1	14 8	27 5	10 7	38 9	1,988	2 000

DREAMS AND THEMATIC APPERCEPTION TEST STORIES

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THE Thematic Apperception Test (1, 2, 3, 4, 6, 7, 8) has been receiving increasingly wider use as a tool in the exploration of an individual's more or less unconscious attitudes and complexes   Concomitant with this development have been investigations about the validity of this projective technique   Since with this test the clinician interprets stories told by the patient in response to a series of pictures for the purpose of abstracting those themas which seem most important in the patient's motivational life, it is clear that the psychologist's experience and objectivity are the most important factors in obtaining a valid interpretation   Two methods of studying the validity of this test have been hitherto employed   The first method, investigated by Harrison (1), was validation by "blind analysis"   These blind analyses, the interpretations being done without any knowledge of the patient's background, were checked item by item of the interpretation with the information supplied in the case histories   It was found that there was an agreement of over 80 per cent between the thematic analyses and the validating criterion   A second method of validation, investigated also by Harrison (2), involves comparison of the thematic analysis with data obtained by another projective technique—in this case the Rorschach Test   Results of this study revealed substantial overlap between the two techniques

The purpose of the present study was to compare the thematic stories with the dreams of the same individual   Since dreams are an excellent source of phantasy life not subject to the errors usually inherent in test-obtained data, they can serve as criteria against which one can compare the more controlled phantasy life revealed in the Thematic Apperception Test   If one interprets the dreams of a subject in the same manner as one would his thematic stories, it is possible to compare similar types of data   Although the interpretation of dreams is a procedure which is by no means handled alike by all clinicians, one may in part avoid the controversial issue involved by analyzing each dream as if it were a thematic story, that is, in terms of the central character or characters with whom identification has taken place, and in light of the relationships expressed among the characters in the phantasy.

Additional hazards are encountered in the use of dream material   It can be maintained that not all the dreams are remembered by the individual, and that those dreams most repugnant to the ego will be suppressed and repressed   Another factor to be taken into consideration is that, since mental defectives served as subjects in this study, one could not obtain the subject's associations to his dreams so as to be able to distinguish more finely between manifest and latent content   However, it is because mental defectives served as subjects that some of the objections to the use of dreams are in part obviated   As Pearson (5) has pointed out in his analysis of the psychopathology of mental defect, the feebleminded person suffers from a permanent defect in the ego function   "This results in a disability of the functions of the super ego   The id is intact   The feebleminded person, because of his ego defect, is confronted with a serious intrapsychic dilemma   He cannot find adequate outlets for the gratification of the demands of his id nor can he satisfactorily repress or inhibit them" (5, p 12)   It follows from such an analysis that the dreams

of the feebleminded will suffer less from the distortion forced upon unconscious material by the super-ego, and that the relationship between the latent and mani-fest content will be less involved than with normals   In addition, since the feeble-minded are markedly more naive as a group, not only about the motivations of others but about their own as well, they are more likely to recount all the dreams they can remember and not to block or suppress as often as the normals

The subjects in this study were 25 girls institutionalized at the Southbury Train-ing School for mental defectives   The IQs ranged from 32 to 90 with an average of 69, and the average chronological age was 23 with a range from 17 to 50 years In 16 cases the dreams were recounted immediately after the subject had finished relating the thematic stories   Since it could be maintained that the mental set engendered by the telling of the stories would influence the subsequent recall of dreams, another group of 9 cases was studied with whom dream data were obtained several days after the thematic session   There was no observable difference between the two groups insofar as the kinds and number of dreams were concerned   The relationship found between dreams and thematic stories held to an equal degree for both groups and they will henceforth be treated as one   The original set of Morgan and Murray thematic pictures was used

It was not thought feasible to reduce the type of data used in this study to quanti-tative terms   It was felt more advisable to present the raw data so that the inter-pretations of the material by the writer could be more readily checked by others

<center>CASE I</center>

Sabina is a 22-year-old girl with an IQ of 55   At the time of her initial admission to an institution the case history stated that this girl was a "poor risk to leave in the community because of the combination of her defectiveness, abnormal interest in boys, and a poor home environment"   The girl's home was considered so poor that she was placed with a foster family   When the home conditions had improved, Sabina was returned but "she was very unruly, stubborn, and the entire family resented her presence"   The psychological summary reads   "a high grade girl who is emotionally unstable and who is easily flustered and frustrated when confronted with a new task   These characteristics result in impulsiveness which lowers her accuracy   She is highly suggestible   This combination of facts makes Sabina a poor bet for an essentially successful placement"

The themas which were found with most frequency in the thematic stories were ambivalence toward the mother, insecurity, fear of separation from loved ones, and guilt connected with a fear of retribution   The following sample story is in part illustrative of the rebellion toward the mother

it's as if she's trying to get rid of the baby—she doesn't look like a good mother—her hair is not neat—she should have neater hair for a mother—if she was neat she'd bring the child up right—if authorities saw her treating the child like that they would take it away from her and put it in a school like this and bring it up right

In several other stories a more positive attitude toward the mother is indicated, but in general the hostility seems stronger   Two stories are given below which indicate the girl's insecurity—seen most clearly in anxiety about lack of food

it's as if he wandered away from home—he has no place to go—he looks at the house over the bridge as if he thinks he'll go in there and stay—he looks kind of cold standing there—by going in there he'll find food and stay alive

this might be a sailor whose ship went down—he was the only one saved from the ship—he has no way of getting food—he is hungry—it looks as if he'll fall down any minute cause he hasn't had food for such a long time

It should be noted that insecurity and anxiety were also manifested in other stories in which some fear as to mental status was indicated   Stories in which either the themas of fear of separation or guilt are revealed follow

maybe it's her mother or grandmother—she don't look well—she is pale—the girl brings her water—she tells her to sit down—the girl looks like a very young lady—the grandmother explains what to do in the house—the girl looks interested and listens to her—she goes and does what grandmother says—she comes back every once in a while to see if the grandmother is all right cause if she died she'd lose one of her best friends—then she'd have to go somewhere where they wouldn't treat her as well—they would have stricter rules

he looks strong and husky—somebody down on the ground is looking at him—he is trying to get him down from the pole—it's as if he's afraid to come down and take his punishment because it would be a severe one

she has her back turned to the boy—it is his mother—she is not pleased with him—she doesn't want to listen to what he says—he done something wrong—she looks worried as if he's going to be put away in prison—she has no one to support her after he is put away

It should be pointed out that the fear of separation from loved ones comes out very strongly in her stories   In the final analysis of this girl's thematic test it was felt that there was a causal relationship between the ambivalence toward the parents and the fear of separation from them   The following are the dreams of this girl.

1   I was in institution X—I dreamt of my father—I was praying for my father—my mother came and pulled my hair—I screamed—she said I'm pulling your hair because father don't need prayers—I do

2   My brother was in the army—he came home on a furlough—my aunt wrote in for me— I went home for the first time—I was glad to be home

3   I went out with Mrs Jones—we sang in Father Smith's church—I came back to the school

4   I saw snakes on the floor—I got so frightened that I woke up to see if the snakes were looking at me

5   We went to institution A—Mr Roselle (superintendent of Southbury) said he was going to leave me there cause my people wanted me there—I yelled in my sleep please leave me in Southbury

6   I had a fight with Mary S —it took some of the staff to keep me from hurting her—I don't like her so well

7   My mother was walking on the street—the boys and girls said there was my mother— I was afraid to look at her cause I knew she was dead—she hollered, "Sabina, Sabina, come to me, I'm your mother—don't be scared because the devil will never hurt you "

The major theme which can be abstracted from these dreams is concerned with fear, anxiety, and ambivalence toward the mother   On the one hand, the mother maltreats the child and is a source of fear and guilt and, on the other hand, the mother is asking in what seems a pleading fashion for the child to be reunited with her   The separation theme comes out strongly in dream 5 when she begs not to be left in an institution, it is of interest to note that the blame for the contemplated separation is laid to "my people " This projection of blame seems to corroborate the conclusion that this girl's ambivalence is in some way connected with her separation from home   In general, the main themas found in her stories are found with equal strength in her dreams

<div align="center">CASE 2</div>

Helen is a 19-year-old girl who is the youngest child in a family of six   Her parents are foreign born who have taken on few American customs. The mother has been inadequate in supervising and disciplining her children   Helen was brought to the attention of the police after having had numerous experiences with boys who picked her up   The type of sexual activity in which she participated was

described as "perversions" Helen's stay in the institution has been marked by many temper tantrums in which her excellent knowledge of abusive terms comes to the fore She is stubborn and recalcitrant with those who supervise her and it has been necessary to change her job very frequently On the Wechsler-Bellevue Full Scale this girl obtained a quotient of 72

The main theme found in this girl's stories was rebellion toward authority in general and the mother in particular Connected with this theme were those of rejection, aggression, and guilt—the guilt coming out in stories in which people "have learned their lesson" Sample stories in which these themas are brought out follow

the mother is carrying the baby from something like an accident—she's carrying the baby so it won't get into danger—it was an accident or something—the mother didn't seem to care at first or the accident wouldn't have happened—now it's too late—she cares for him now—it wouldn't have happened if she cared

the girl is trying to explain something to the mother—the mother is sick and the girl is trying to talk to the mother nicely but it doesn't seem to work out—the expression shows the mother doesn't care much about it—the girl is trying to be polite and reason—but the mother doesn't seem to care

the boy is supposed to take violin lessons—he doesn't care about it—he's sort of sleeping— he doesn't care to take violin lessons by the expression on his face—he didn't care to take lessons in the first place—he didn't listen to his elders—if he did he would take lessons

the boy doesn't want to listen to his mother—he did wrong—his mother told him to be good—he didn't care—she told him not to bother her any more—she doesn't seem to care for him—if he listened to his mother nothing would have happened—he'll learn his lesson what his mother told him but it is too late

From these stories, it seems clear that feelings of rejection are a basic factor in her personality organization and that as a result one finds her reacting by placing blame both inward onto herself and outward onto the family Moralization appeared frequently in the stories as an expression of her own guilt feelings. Her dreams follow·

1. I dream of going out some day—my brother is in the service and I dream will I ever see him again?

2 I dreamt how I had a fight with a girl—we had an argument—we made up—and we were good friends after that

3 Someone asked me to change my faith or be killed—I said I would rather die—I died in the dream

4 I dreamt I was home—I went to a party—it ended late—my mother asked me to come home early—I told my friends that—they said "the fun is just beginning"—I said I had to—one of the boys took me home—I was home in time

5 I dreamt I ran away—I went home—I banged on the door—my father said he was coming to open the door—but he never came—I waited—but I got tired—I went back to face my punishment

6 I went home on Christmas—everything seemed different—I told them I was put away for training—they said I should have another chance

7. I dreamt I walked out on a job—I felt awfully sorry—people told me how it would have been better if I didn't walk out

8 I dreamt I would find a boy who liked me—I would have a nice home and children of my own

The mixed feelings toward the home are again demonstrated In several of the dreams one finds not only the strong desire to be home but also the deep feeling of rejection from the home this girl harbors In dream 6 the parents forgivingly grant the girl "another chance" but in dream 5 the girl is not allowed admittance into her own home In dream 4 the conflict between the rules of the mother and

the desires of the girl is in evidence   In addition to dream 4 where there is an undercurrent of rebellion, dreams 3 and 7 are also illustrative of this girl's aggressive recalcitrance   The feelings of guilt, which seem connected with her negativistic attitude toward authority, are seen in dream 5 where she ran away but ultimately "went back to face my punishment," and in dream 7 in which she "felt awfully sorry" for walking out on a job—a usual occurrence in her institutional experience   It is clear that the projective material in the thematic stories and the dreams are largely concerned with similar personality factors

CASE 3

Rose is a 38-year-old woman who has been in institutions for mental defectives since 1915   She comes from a most disreputable family, in which the girl's father "traded the patient's mother for an alarm clock to his brother "   Rose is a chronic run-a-way during which times she has had sexual intercourse with any and all men—a propensity which necessitated sterilization   Her IQ on the Stanford-Binet (1916) was 63 She has long had the reputation for possessing a fertile imagination of which intensive song and poem writing are only two examples   She has felt neglected because her family has shown so little interest in her, and her disappointment about this went so far as to deny at times that she knew anything about her people—maintaining that she had been found wrapped in a blanket beside a river.

Four main themas emerged from this girl's stories   The first had to do with ambivalent feelings toward the parents—especially the mother   In several stories the mother is described as being neglectful of the child and too authoritative, and in others the mother is seen as a benevolent, affectionate woman who becomes distraught at any misfortune which befalls her children   The following are two stories which illustrate the ambivalence

the mother shouldn't hold the baby that way—you are supposed to hold them more gently—she's a funny-acting woman—they ought to take the baby away because she don't know how to take care of it—(patient then demonstrated how gently one must handle a baby)—maybe she was married and had a child—her husband deserted her—she went a little wacky—I guess—she doesn't wear no shoes—suppose she thinks she's a Spanish dancer who doesn't need shoes

This little girl is sad—her people have gone away—she's looking out of the window—wondering whether they'll be back—if she was bigger she could go—she is staying with an aunt who is mean to her—she keeps looking and looking—she cries—her aunt calls her—you better come, Jane, it is supper—I don't want supper—I want my mother—her aunt says it will only be a few weeks—no, said the girl—I'll go with my mother—she packs her clothes and runs away—she is with her mother and is very happy.

The second theme which occurred frequently was concerned with a desire for money and recognition   In these stories the central character is usually one who from a humble and lowly position in life is able to rise to one of power and greatness   The following story is illustrative

This was a long time ago—his name is Bobby—his father said to him, I want you to be a musician like I was—the father bought him a violin—he told Bobby to practice and he'll be famous like Tchaikowsky—he got despondent one day—he put the violin down and said: Dad, there will never be any hope—I'll never be a violin player—Father said that practice makes perfect—he had to practice when he was younger—Bobby thought maybe you're right—he picks it up and starts to play—after all they bring him to New York in a concert—in front of Tchaikowsky—he said he was swell—he signed a contract—he became famous—Bobby now is the most famous violin player in the world.

The two other themas which were considered of major importance were concerned with love and marriage, and with religious faith. Several stories are concerned with "a married couple who were very happy" or with a man and woman who are

"devoted to one another and fell in love" There is a tendency in these stories for the woman to be left alone because the husband is sick or else "sailing away after kissing her goodbye" The theme of religious devotion, one which emerged frequently and told with a note of fervor in her voice, is shown in the following story

this is a hump back boy—he got it from infantile paralysis—his mother asks the doctor if his back will be all right—I don't think so, said the doctor—the only one who will make him better is to take him to Canada to the Saint's shrine—she went upstairs and prayed—before that he was laying on the couch discouraged—I'll never be better he thought—after he went to Canada he got better—now he got a job—making pretty good money—I had infantile paralysis

There is no record of this girl's ever having infantile paralysis It is also of interest to note how the desire for money crops out in this story as it does in many of the others The dreams which this girl related are given below

1 I was walking—I saw this house—it was a strange house—somebody was with me—they said go in—I said no—later I went in—I saw the snake wrapped around the pole—I got scared—I yelled and woke up

2 I could see my father and mother—they said to me you better be good—Pa, I said, I'm always good—they gave me a great big crucifix—it shined pretty—I said to my mother I always wanted one and never could get it

3 I was walking on top of the water—then I went underneath it—as if there was an opening—I saw a mermaid—I said what is this place called—this is wonderland—if you come with me I'll show you beautiful things—I walked with her—we came to a door—a golden door—I touched it—then beautiful things like diamonds and crystals came through it.

4 I dreamt I had St Theresa's book—I put the book under my pillow—I came out of the house—I saw my mother—she said where is St Theresa's book—I said I didn't know—she said don't lie to me—she got awful mad at me—I tried to run away from her—she had hold of me—I couldn't go—I started crying—we came to a manhole—she said you find me St Theresa's book or I'll push you in—she pushed me in

5 I dreamt I'm getting murdered—these men they shoot—I get it in the back—I can feel their hands around my neck—they are looking at me—I get scared—I can hear a lot of shooting

6 Miss C took me to her home—her mother was there and my mother—she took me upstairs and showed me her room—it was all in blue—a pretty blue—I said what a wonderful home—she said yes—I don't have to work for money anymore because I'm a millionaire—I came down stairs—I smelled something cooking—yelled upstairs what are you cooking—chicken, she said—it don't smell like chicken—I went to the table—picked up the casserole—there were all kinds of ice cream—I ate and ate and ate

7 I dreamt I was dying—I could see myself going—you can see the angels and the Lord—I saw the Lord right in front of me—it was so like real—I tried to wake up but couldn't—my heart beat faster—I heard voices saying—poor girl, she's dying

8 I went out of here (Southbury), I was singing my songs in front of a microphone—I said to Al Jolson do you think I'll go over big—sure, he said—I said I've been practising and practising—I want to be a good singer and dancer—then I was on the stage—I had a beautiful gown on—I was tap dancing—in Hollywood—what a beautiful gown I had on

When one remembers that the main themas which were elicited from this girl's stories were ambivalence to the parents (especially the mother), desire for recognition and greatness, love and affection, and religiousness, the significance of Rose's dreams becomes apparent Again one finds (dreams 2 and 4) parents as being, on the one hand, protecting and kindly, and, on the other, harsh and condemning The hostility of the mother towards the girl bears out the analysis of the thematic stories as to mixed feelings toward this parent The guilt and anxiety which are found in the dreams, however, are not as strongly in evidence in her stories. The

desire for greatness, money, and recognition, which appeared so strongly in her stories, comes out with equal force in dreams 3, 6, and 8   The religiousness which was so obvious in her story likewise appears in dreams 2, 4, and 7   The theme of love and affection, the least clear of the major themas, is also only vaguely present in the dreams

The similarity between dreams and thematic stories illustrated in the three cases presented is also found when one analyzes the data obtained from the remaining subjects   Not in every case were all the major themas in the thematic found in the dreams, but in no case were data from any one subject at complete variance   The validity of thematic interpretations is felt to be demonstrated   The results of this study also show how easily obtained, projective data such as dreams can be used to corroborate a thematic analysis, another means is thus placed at one's disposal of reducing the errors introduced by the interpreter's biases

BIBLIOGRAPHY

1 HARRISON, R. Studies in the use and validity of the Thematic Apperception Test with mentally disordered patients II A quantitative study   III Validation by the method of "blind analysis" *Char & Pers*, 1940, 9, 122–138
2 HARRISON, R   The thematic apperception and Rorschach methods of personality investigation in clinical practice *J Psychol*, 1943, 15, 49–74
3 MORGAN, C D, & MURRAY, H A   A method for investigating fantasies *Arch Neurol Psychiat*, 1935, 34, 289–306
4 MURRAY, H A *Explorations in personality* New York Oxford University Press, 1938
5 PEARSON, G H J *The psychopathology of mental defect* *Nerv Child*, 1942–43, 9–20
6 ROTTER, J B   Studies in the use and validity of the Thematic Apperception Test with mentally disordered patients I Method of analysis and clinical problems *Char & Pers*, 1940, 9, 18–34
7 SARASON, S B   The use of the Thematic Apperception Test with mentally deficient children I A study of high grade girls *Amer J. ment Def*, 1943, 47, 414–421 II A study of high grade boys *Amer J ment Def*, 1944, 48, 169–173
8 SARASON, S B, & ROSENZWEIG, S   An experimental study of the triadic hypothesis reaction to frustration, ego-defense and hypnotizability II Thematic apperception approach. *Char & Pers*, 1942, 11, 150–165

REVIEWS

EDITED BY EDNA HEIDBREDER

GAUGING PUBLIC OPINION   By Hadley Cantril et al   Princeton   Princeton University Press, 1944   Pp xiv+318

The claim is being freely made that while the decade starting in 1917 was the heyday of group intelligence testing the present decade is, dominated by polling and interviewing   Therefore, if this statement is true—and the reviewer feels that it is— *Gauging Public Opinion* is a timely publication *

Most books written by a group of collaborators tend to have a weakness of plot and varied styles of description and data presentation   The above generalization seems to fit this Cantril-edited book   In particular, an insistence on better descriptions of tables would have helped the reader immensely, for all too frequently he remains befuddled as to just what was done   More population figures or measures of critical differences would also have helped to clarify many of the pictures   As it is, one often cannot be certain when to consider the differences mentioned in a particular experiment as significant

Gauging Public Opinion is divided into six parts   The first has to do with the meaning and wording of questions, the measurement of intensity, and with problems associated with batteries of questions   The reader's reaction to the experiments here presented on meaning and wording will probably depend largely on his own temperament   If he is relatively uncritical he will be intrigued with the ingenuity displayed in the experiments and will accept the authors' implication that American commercial polling is relatively free of these semantic difficulties   If he is more critical and skeptical he will note polling items in other chapters which seemingly are as bad as the worst here considered and he will wonder how much attention is really being paid this issue by the commercial pollers   The experiments on intensity and battery construction show clearly that the pollers of the future must make increasing use of these techniques

Part two opens with descriptions of experiments on secret vs nonsecret ballots and "trained" vs "untrained" interviewers   The quotation marks around the words "trained" and "untrained" were put there by the editor or the author advisedly as the chapter refers specifically to only one setup and, as far as the reviewer could tell, touches hardly at all on the question of thorough training   The chapter on reliability which comes next contains almost the only discussion of the vitally important matter of validity   The author concludes that the matter of expense has so far kept researchers away from a crucial study of validity   This conclusion is undoubtedly true and forces the reviewer to the conclusion that the commercial pollers should make it their business to assemble money for a proper study   At the present time their work has known validity only as it refers to election returns   But pollers do not limit their labors to this field

The section closes with several chapters on bias   The most significant data here refer to the discrepancies found in the polling of Negroes by pollers of the same and of different color

Part three discusses certain problems of sampling and covers much interesting ground   Many readers' will be particularly impressed by the successes which have

come through the use of small samples   The authors are careful to show that the small-sample technique will not elbow out more ordinary techniques as the former has rather definite limitations

In part four the discussions center on opinion determinants   On the methodological side perhaps the most interesting area concerns the development of an educational-economic ratio (Wed/Weco) for the study of the relative importance of these two variables   The chapter on trends ends with seventeen "laws" of public opinion The reviewer accepts most of them but agrees with another recent reviewer who felt that they grew as much out of current psychological theory as out of the data presented in the book   Law 5 seems to be the most questionable   It holds that "By and large, public opinion does not anticipate emergencies—it only reacts to them "

Part five presents the Harding "morale" data   Here the usual steps of *(a)* deciding on *a priori* grounds the components of morale, then *(b)* factor analyzing into several supposedly independent factors, and *(c)* combining these into one single measure of morale are followed   The reviewer finds it difficult to follow the logic of this attempt to establish the existence of an overall "civilian morale"   He also objects to the assumption that everyone who says that he is clearly aware of an objective is truly so aware   The interviewer admits to what is perhaps a complex against items such as appear in the Harding scale to which there is only one intelligent answer (Do you think the British are doing all they possibly can to win the war? Do you think we are now doing all we can to defeat Japan and Germany or could we be doing more?) or in answer to which a series of books should be written (What would you say the war *is* all about?)   As work on "morale" would seem to be in a very confused state generally, Harding's studies should not be singled out for particular condemnation   As a matter of fact they seem to the reviewer infinitely better than most of those reported in the earlier SPSSI volume on "civilian morale "

Part six consists in appendices which give data on "civilian morale," interviewer bias, sampling, and intensity, display maps and charts, and offers a bibliography of research of about 111 titles for the years 1936–1943   Outside of the fact that the bibliography has more than its due share of errors it should prove helpful to the student of polling, as should the other appendices

Gauging Public Opinion is dedicated to George Gallup and discloses in almost every section how closely the Office of Public Opinion Research works with the American Institute of Public Opinion and its subsidiaries   It is a splendid thing for science that the academic and the business aspects of polling can be so harmoniously and fruitfully united   Let us hope that this union will continue for many years to come, yielding worthwhile interpretations and, in particular, validations

<div align="right">PAUL R FARNSWORTH</div>

Stanford University

THE STRUCTURE OF MORALE   By J T MacCurdy   New York   Macmillan, 1943

Psychologists who are familiar with this author's little volume from the last war *(The Psychology of War)* will expect good things from this one   For the first ninety pages, more or less, they will be pleased   From there on, the outcomes are not so satisfying.

As long as MacCurdy sticks to the "pure" level of psychology, he does very well indeed   He applies the principles of conditioned response very neatly to the emotion of fear in persons untouched by bombing attacks, "remote misses," and "near misses"   He makes a blunder regarding the behavior of the dog in the salivary

experiment (p 5) which can be ascribed to lack of personal experience with this setup, but otherwise this section is excellent (esp pp 10–23)

The discussion of unconscious scales of value (frames of reference) is also good (pp 59–61) He makes the point very concisely that the average man cannot examine his nationalist prejudices objectively, because they are pre-verbal and irrational I do not agree with his notion that Trotter's "herd instinct" is the dynamic basis for the compulsiveness of these social stereotypes Erich Fromm, for example, in *Escape from Freedom* has given what seems a more defensible interpretation But the ironical aspect of MacCurdy's comments on the social distortion of reason is the extent to which he himself illustrates the phenomenon in the last half of his book

The discussion of "national morale," with reference to British, Germans, Japanese, etc , is a mixture of fact and legend This is not the clear-thinking MacCurdy who wrote *The Psychology of War* twenty-five years ago Curiously enough, his most objective interpretation seems to be that of the Russians For "evidence" about Germans, he relies on that bizarre collection, *Thus Spake Germany*, which certainly proves nothing at all He indulges in utterly contradictory statements (the Nazi system is "slavery   imposed on German citizens" but Hitler's policy "has the enthusiastic support of nearly all Germans", both on p 132) He also repeats the outrageous falsehood that "Hitler was elected by a larger majority than any ever recorded in a 'democratic' country " The author has apparently forgotten that *the Nazis never even polled 50 per cent of the vote in a free election*

His treatment of the British "national character" is equally lacking in objectivity Here he goes for evidence to the poetry of Rupert Brooke and other nostalgic Britons! The statement is made, for example, that "there has always been a strong feeling of responsibility associated with the British Raj" (p 134) I wonder how he would document this point

From the theoretical side, one misses most a recognition that we must deal with individual Germans, individual Japanese, etc Much of the writing smacks of the "group mind" notion The wide differences among citizens of each nation are ignored This, it seems to me, loses the very essence of a psychological approach to national problems

In the final section of the book, MacCurdy deals with types of social organization Some shrewd observations are made on the problems of centralization and decentralization, communication between departments, bureaucracy, etc Unfortunately, this lapses at times into a defense of the British aristocracy and praise of the "old school tie "

Some day psychologists are going to develop a technique for achieving insight into their own social values When they do, better books on social psychology will be written In the meantime, we shall have other disappointments like this one

<div align="right">Ross Stagner</div>

Dartmouth College

How to Think about War and Peace By M J Adler New York Simon & Schuster, 1944

This book unquestionably constitutes an outstanding contribution to the literature on war and peace Written by a psychologist turned philosopher, it ranges freely through the fields of history, politics, sociology, and logic Primarily it is a semantic analysis—a patient, step-by-step dissection of the words which are so commonly misused in discussions of the problem of war between nations

"Peace" between nations so far has been a *truce*, and, similarly, "war" has referred to the "shooting stage" of conflict, whereas economic and diplomatic war continues during the period of nominal peace Within organized social groups, however, we have had true peace, that is, men have lived and worked together, settling conflicts under law rather than by force

"Sovereignty" has its internal and its external aspects *Internal sovereignty* defines that collection of force and authority under government which maintains civil peace It constitutes a denial of the unlimited sovereignty of the individual—the right to resort to violence in behalf of his selfish desires The internal sovereignty of the nation is thus essential to civil peace *External sovereignty* on the part of national governments is their denial of any authority or force superior to the government—the anarchic right to resort to force if necessary for selfish ends

External sovereignty is the *one* ultimate cause of war All other factors—race prejudice, economic nationalism, hate and fear, ideological differences—exist within nations and do not cause war Therefore the one essential change in world political organization is the establishment of a World Government which will be sovereign over all nations This need not deprive the national governments of internal sovereignty As an excellent aid to clarification of thinking on this question, I recommend careful study of the ten questions on pages 143–145 They define sharply the basic differences between an international organization which can function and one which can be only a debating society

The biggest obstacle to this reform is nationalism People say "Germany first!" "England first!" "America first!" Thus they resist any attempt to merge the nations' external sovereignties in a new organization Nationalism is a stubborn problem, but Adler believes that it can be whipped He envisions advances in education for international thinking, followed by experiments in organization—then more advanced education, better organizing, etc Roughly, this process is estimated to require about five hundred years In the meantime we shall have some more world wars Adler is, he specifies carefully, a long-run optimist, but a short-run pessimist

Behind the addiction to nationalism and the belief in sovereignty are certain notions about the value of nationalistic practices Wealthy groups feel that they have a big stake in the existing order Labor is sold on the idea that internationalism means lowering the standard of living Inasmuch as at least the latter of these is demonstrably false, better education will help wipe it out

Opposition to international government arises in part from a false polarity full sovereignty versus subjugation by some outside nation It should be made clear that there is a third choice—cooperation of *equal* nations in a World Federal Government No nation need be subordinate to any other

Adler is under no delusions regarding the possibility of using a world government to bolster up existing economic and political injustices He frankly concedes the necessity of revolutionary economic reforms (p 263), expressing the hope that they may be achieved without violence He also opposes flatly any distortion of world organization to shore up tottering empires Any such trick will surely lead to war

The author gives many fine examples of the avoidance of polarized thinking Reality obeys the curve of normal distribution, and differences are distributed along gradients We can have *more* or *less* democracy, we can have stages in the scale from war to peace Long-range peace plans must adopt plans for lengthening the *truce* between wars which attempt also to move gradually in the direction of world organization

It would be possible to quarrel with petty details in this book, but they would clearly be petty   Perhaps my chief regret is that it is not written in a somewhat simpler style, although even in that regard it is rather good   I should, of course, like to see more on the psychological obstacles to peace, and a clearer recognition, of the irrational elements involved, Adler shows signs of an excessively rationalistic approach   But that is a minor criticism

I feel that every psychologist ought to read this book, and persuade as many others as possible to do likewise   I should like to see it somehow made required reading for all U S Senators, some prominent British Empire statesmen, editorial writers on all newspapers, and everyone who believes that peace is compatible with the persistence of unlimited sovereignty in external relations   If this should happen, we might chop a substantial percentage from Adler's estimated 'five hundred years to peace

<div align="right">Ross Stagner</div>

Dartmouth College

ROMANTICISM AND THE MODERN EGO   By Jacques Barzun   Boston Little, Brown & Co 1944 Pp 359

This critique of modern culture has too wide a scope to be classified with any one science, but the book should be of value to social psychologists because it reduces such stereotypes as "Romanticism," "Classicism," and "Modernism" to terms of clusters of attitudes which perennially dominate human behavior, although some one particular group of attitudes is preeminent in a given historical epoch   Social motivational factors are invoked to explain the various historical shifts in dominance

From Rousseau to Wagner, from Victor Hugo to Thomas Mann, "Romanticism" is depicted as an expression of social revolutionary aspirations   It arises when calcified institutional forms seem effectively to block the upward strivings of superior egos   Finally, the forms are shattered, but not before their pressure has distorted and rendered morbid many of those same superior egos   Revolutionary in aim, the romantic attitude has always included a certain fascination in the face of human weakness and suffering, and even in the face of folly, vice, and madness   Romantic is the aspiration to make a new world despite the awareness, or even because of the awareness, that final vulnerability will never be canceled from the human equation   The religious consolation is therefore acceptable to a large class of romanticists

"Classicism" is said to express satiety after excessive change, or disinclination for further change springing from other motives, not the least common of which is fear in one form or another   Occasionally classicism requires and generates tremendous personal and social energy, as witness the Inquisition, the Napoleonic empire, and the Fascisms   At their outset, such classicisms are congruent with certain romantic motives, but the essence of the romantic attitude is inimical to any established absolutism   Classic and romantic attitudes therefore interpenetrate in the most illogical and Protean combinations

"The Modern Ego" of Western man is an enigma which the author believes can most accurately be solved in terms of what might be called a shamefaced romanticism   A striking trait of this ego is said to be its embarrassed self-consciousness which oscillates between contempt for self and inflated bragadoccio   It "debunks" past greatness in order to achieve a psychological environment more compatible with its own estimation of the human lot   The author asks whether the twentieth-century world of experience justifies "the ending of every lyric in sneers, the petering out of every tune in percussion and dissonance, and the decoration of all physical beauty with maggots"

Since the romanticism of the modern ego of Western man shows these morbid traits in such a large proportion of instances (and Dr Barzun's study is thoroughly documented), it is not surprising that classicist, absolutist alternatives have been adopted by a not inconsiderable minority These alternates range from doctrinaire Roman Catholicism to doctrinaire Marxian materialism Like shamefaced romanticism itself, these neo-classical alternatives are regarded by the author as so many forms of defeatism Personal and social progress which uses various theories, but which is dominated by no absolute dogmas, and a will to progress which can tolerate the coexistence of many parallel and interacting social formulae—this is the psychologically healthy way according to Dr Barzun, who insists that it was also the way of the great "romantics " Whether this way will be adopted by Western culture he regards as very doubtful, although he is not without hope that it will be

As social psychological description using quasi-popular language, this book will be found satisfying by many readers even among the strictly psychological group And some of its explanatory hypothesis are equally sound But one question it does not answer, and that the most crucial for psychologists The romantic attitude in its most dominant form would seem to involve both revolutionary courage and a liberal tolerance which perhaps presupposes even greater courage, or at least presupposes very deep psychological security Why does the "Modern Ego" find that combination of resolution and tolerance so elusive? Why is the liberalism of Western culture a painful oscillation between fascinating but inimical alternatives? The present revolutionary situation, if it be such, differs from previous revolutionary situations in some highly significant respects which Dr Barzun has not been able to define And although the reviewer agrees with the author that the acceptance of religious absolutism would be cowardly, and futile in the long run, nevertheless it is necessary to ask whether the Modern Ego can return to equilibrium before its attitudes concerning the cosmic status and the "chief end" of man are clarified In other words, how can modern man show liberal courage in regard to local issues while he remains uncertain whether the game of life has any ultimate value? What can modern psychology say on this point, if anything? Sooner or later it must clarify its own attitude on this point

Dr Barzun is alive to developments in psychology and he feels that the so-called depth psychology of Freud and related theorists betrays the same ambiguity which characterizes other productions by the "Modern Ego " The psychoanalytic stress upon motivation is romantic, while the tendency to interpret all higher motives as masks for the least enlightened betrays the familiar modern defeatism regarding the whole human situation The modern stress on "sexuality as against love" is said to be typical Barzun would probably agree with Professor Harold McCurdy's comment that psychoanalysis, as it were, recognizes the devil while denying God Horrified at the repression of one class of human motives, depth psychologists apparently fear all the other classes Anxious to see the sex life admitted as an aspect of the highest human existence, they tend to forget that its requirements may be modulated to individual life styles In Dr Barzun's own words "Eating is still thought of as an integral, homely part of human life, whereas loving has for significant reasons been detached and made into sex" (p 175) And again he writes "The systematic depersonalization of love made it into sex" (p 179)

One might add that, equally with repression, do the depth psychologists dislike every form of personal distinction, everything that lifts individual motivations above what is the impersonal or universal least common denominator of motives generally Thus much of the psychology toward which the modern ego in many instances turns for salvation from anxiety, itself seems to be sunk in that same

morass of anxiety and resentment where dwells all sickly, shamefaced romanticism
Well might the man in the street exclaim 'Physician, heal thyself!" What really
stands in need of healing is nothing less than the whole social and philosophic
order of Western man, which still rallies under the artificial stimulation of attacks
from without, but which nevertheless shows many signs of being, and probably is,
fatally diseased   At such a juncture as this the revolutionary romanticists, one
imagines, should secretly be preparing some new world and gathering strength
for the task of objectifying it   To date, however, the signs of this have been rela-
tively few and neither Dr Barzun nor other keen social observers can point to
many promising trends

<div style="text-align: right">ROBERT F CREEGAN</div>

University of Mississippi

MATERNAL OVERPROTECTION   By David Levy   New York Columbia University
  Press, 1943 Pp ix+417 $4 50

To most students of personality formation the attitudes of mothers toward their
children is only one of a vast number of problems in social behavior, but to Dr
David Levy it is the one problem most worthy of study   For, in common with
other child psychiatrists, he views mother-child relationships as the source and
prototype of all subsequent social response   For more than a decade he has been
demonstrating his allegiance to this hypothesis by engaging in research upon the
opposite extremes of maternal behavior—rejection at the one end and overprotection
at the other   The present volume, which presents an analysis of the etiology, con-
sequences, and possibilities for prevention and cure of overprotection, is based upon
twenty case studies from the New York Institute for Child Guidance   Case his-
tories obtained at the time of the child's treatment are supplemented by followup
interviews from nine to twelve years later   Although the number of cases is small,
Dr Levy acknowledges indebtedness to and draws liberally upon fifteen pre-
liminary studies of the topic made by students of the Smith College School for
Social Work between the years 1929 and 1932
  One of these authors located 96 cases of overprotection among 526 seriatim cases
from the Institute files   The small number of Levy's cases results from his decision
to use only those in which overprotection appeared in its "purest" form, unmixed
with rejection and uncomplicated by guilt   Hence his first criterion for selecting
cases was that the child should have been wanted before birth   To safeguard
against possible psychiatric bias he chose only cases in which a layman as well as
a psychiatrist had remarked upon the mother's overprotective attitude   Additional
criteria were that the child should have received clinic treatment in addition to
diagnosis, and that the records be sufficiently complete to warrant study   These last
probably weight the group with the more cooperative mothers   Approximately two
thousand cases were sifted in order to obtain the twenty cases that met these
criteria   It happened that nineteen of these cases were boys, a fact that might have
tempted a psychoanalyst to belabor the Oedipus theory as an explanatory principle
Levy avoids this ready-made interpretation in search of the dynamics of the mother's
attitude
  After describing his selection of cases he draws the following picture of an over-
protective mother

a mother who holds her child tightly with one hand and makes the gesture of pushing
away the rest of the world with the other   Her energies are directed to preserve her
infant as infant for all time, preserving it from harm and from contact with the rest of
humanity (p 38)

Although in some respects Levy's description of his procedure is unclear and hard to follow and his justification of his method somewhat naive, he reveals himself a master of clinical research in his choice of meaningful and dynamic categories into which to analyze the data   He describes four symptoms manifested by overprotective mothers—excessive contact, infantilization, prevention of social maturity, and maternal control   Excessive contact was manifested by fondling and hovering care, by prolonged nursing care during illness, and by sleeping with the child long past infancy   Under infantilization Levy considers only the length of breast feeding, and presents evidence to show that overprotective mothers nurse their babies longer than rejecting or emotionally wholesome mothers   These mothers prevented social maturity by restricting their children's play with other children, by refusing to allow them to take ordinary risks at play, by helping them with their school work, and by taking hostile attitudes toward teachers   With respect to the mothers' influence on school success Levy found that the children tended to excel in linguistic skills and to report reading as their chief interest, whereas they were poor in arithmetic   Children of rejecting mothers, by contrast, were less retarded in arithmetic and more retarded in reading   Concerning maternal control, eleven children were indulged and nine were overdisciplined   Under such maternal handling the children manifested a variety of problems, the most serious from the psychiatrist's standpoint being their lack of friendships and normal social outlets

The most interesting section is Levy's inquiry into the factors leading to the development of overprotection   The majority of these mothers experienced a long period of anticipation of the baby, caused by relative sterility, death of previous offspring, or complications of earlier pregnancies   The majority also were both sexually and socially incompatible with their husbands, and hence sought their chief companionship in their children   During their own childhood most of the mothers had suffered from "affect hunger" (lack of sufficient affection from their parents) and had been saddled with household cares or with the necessity of working to contribute to family support   Thus they were deprived of a carefree childhood, and many of them suffered from thwarted ambitions, but they developed into aggressive and excessively maternal women   Their husbands were, for the most part, meek but stable providers   From this analysis Levy derives his theory of maternal overprotection (pp 148–149)   True maternal overprotection occurs, he says, in "naturally maternal" women whose behavior is intensified by the operation of the above-mentioned psychic and cultural factors   He finds it necessary to postulate that overprotective mothers are "naturally maternal" because in previous studies he has discovered that rejecting mothers likewise suffered from affect hunger in their childhood, had responsibilities thrust upon them at an early age, and were sexually frigid   Hence Levy believes that the difference between the overprotecting and rejecting mother has a constitutional, probably a hormonal basis, and he reviews some of the animal literature on maternal behavior in support of this thesis   His only evidence for a constitutional basis for overprotection is the success of these women in prolonging lactation   While his argument here seems a little weak, he at least discards the penis-envy theory of maternal behavior as biologically unsound

Levy's evaluation of treatment is refreshingly frank   Only two cases were successfully treated, the others showing only partial improvement or none at all   At the time of followup only two could be considered well adjusted, but only two were definitely maladjusted   The remainder were in the partially adjusted group   Levy attributes lack of success in treatment largely to the mother's unwillingness to have her child changed or to modify her own attitudes and methods   But he

also blames the therapists' conviction that anything short of psychotherapy was treatment of an inferior sort and not to be used   The attempted psychoherapy failed in almost every case, whereas efforts to separate the mother and child for short periods and to help the mother find social outlets effected some improve, ment   He believes that more treatment at the manipulative level and the recognition and use of the father as a therapeutic agent would have brought greater success This latter is based upon the fact that those who had improved at followup had in general become more companionable with their fathers   The status of the cases at followup when most of the patients were in early adulthood tends to confirm Levy's belief that maternal influences are lasting

One important contribution of the book should not be overlooked, namely that it serves as an excellent illustration of the usefulness of case material collected for therapeutic reasons in the solution of problems of human relationship   Levy points out that it is, for humanitarian reasons, impossible to experiment in human relationships, but that life itself is constantly performing such experiments, and the records are to be found in the files of clinics and social agencies   The process of converting case records into scientific data is one requiring keen clinical insight, otherwise the analysis becomes cluttered with irrelevancies   In a final chapter and an appendix Dr Levy includes all the case material on which the study is based One who is unclear about the difference between case studies and research based upon case studies would find it instructive to compare the first and last portions of the book   Such a comparison leaves one only with admiration for the high degree of clinical skill that has gone into the preparation of this book

MARY SHIRLEY

Indiana University

INTRODUCTION TO EXCEPTIONAL CHILDREN   By H J Baker   New York Macmillan, 1944

This seems to be "just another textbook" in a field where there is a crying need for something which will adequately fulfill the needs which Dr Baker recognizes in his preface   an overall view of the field for those planning to specialize in some field of exceptional children, and an introductory course for the regular classroom teacher that she may recognize potential candidates for special classes   One of its greatest faults seems to lie in the confusion of purpose which is apparent even in the preface, where the author states in one place, "It is desirable that all such groups shall have some understanding of the nature of these children and what an effective educational program for them should contain", and then on the next page, "This book is intended to present characteristics and problems of all types of exceptional children rather than to give a complete description of special education suited to their needs"   Were the descriptive and historical sections under the consideration of each type of exceptional child somewhat condensed, and a more adequate presentation of the real problems and possible solutions presented, the text would be an admirable one for an introductory course

The scope of the volume is certainly adequate, presenting as exceptional children the physically handicapped, the problems of all the varied levels of intellectual development, various neurological and psychogenic diseases, as well as those with behavior adjustments and educational retardation   Under each specific type of exceptional child is considered the problem of definitions, methods of diagnosis, personality characteristics, the number found in the general population, the history of attempts to solve the problem, and current problems in the field   As has already

been stated, however, the history and diagnosis far outweigh the current problems which are generally presented in an inadequate page or page and a half

Furthermore the presentation of the educational problems does not really go deeply enough to be of adequate help to the classroom teacher who, as Dr Baker points out, must often deal with the border-line case which is just under the level set for special-class instruction   Under rapid learning, to select one instance at random, curriculum adaptation is considered as the primary problem   In two extremely brief paragraphs the author presents the point of view of "extra promotions," or "enriching the curriculum," in neither case showing either the real advantages or difficulties or explaining just how it may be done

One other general weakness seems to the present reviewer to pervade the entire book   Dr Baker makes, and re-emphasizes, the important point that as individuals the exceptional children "differ from the normal mainly in degree, depending upon the severity of the defect or deviation"   This is a fundamental point when one is considering the exceptional child as an individual, and is essential as a basis of understanding for either the regular or the special-class teacher   But it is not true when one is considering the exceptional child as an educational problem   For as an educational problem the teaching of exceptional children differs from the teaching of the normal in many respects   in curriculum, in methods of teaching, in presentation of material, in the type and number of educational devices that are used, and in the level of instruction which can be the aim of the teaching   To overlook this distinction between the exceptional child as an individual and as an educational problem seems to vitiate largely the purposes of the book

If this *Introduction to Exceptional Children* is used as a textbook, and enriched through the following up of the excellent reference material contained in it, it could be made adequate for an introductory course   But in order to be so used it would be necessary for the instructor to have had wide experience with exceptional children so that the weaknesses of the book could be overcome in the lecture material which would accompany its use as a text   For the ordinary classroom teacher who is constantly coming in contact with exceptional children there is still need of an introductory text which will make her keenly aware of the problems and their possible solutions in this field where so much needs to be done in most of our educational systems

DOROTHY TILDEN SPOERL

American International College

OUTLINE OF PSYCHIATRIC CASE-STUDY   A Practical Handbook   (2nd ed, rev and enlarged)   By Paul William Preu   New York   Paul B Hoeber, 1943 Pp xviii+279

This book is intended to perform a practical teaching service, the training of house-officers in the technique of psychiatric history-taking and mental examination The author expects it to be used not "as a textbook of psychiatric diagnosis and treatment but as an aid in eliciting the facts on which diagnosis and treatment are based "   Short sections deal wisely with the arts of interviewing, establishing rapport, and guiding conversation into profitable channels, but the bulk of the book consists of highly detailed questions constituting a comprehensive survey of the patient's past history, personality, and present problems.   This is a book to be studied, not merely read   It is assumed that the student reader is in clinical training with ample opportunity for daily practice, if this condition is realized, the lack of concrete illustrations in the manual will not be felt as a shortcoming

The second edition has been rather completely rewritten, with considerable material added As it stands, there are three outlines for use with adults psychiatric history-taking, behavioral examination, and a special form of examination for stuporous or comatose patients, and two outlines for use with children six years old or older. psychiatric history-taking and behavioral examination The reviewer found the outlines for adults highly satisfactory, but detected less thought and perhaps less experience in the methods recommended for children He did not agree that emotional relationships within the family could be sufficiently ascertained by questioning the parents, no matter how perfect the rapport, and he thought that here there was room for an attitude more sympathetic than the author's toward play and projective techniques He saw no sign, moreover, of the strong contemporary trend in work with children to concentrate, during the early interviews, on building a therapeutic relationship with child and parent, letting the formal history take a secondary place Nevertheless, there is good educational wisdom in Preu's statement that "the beginner in psychiatry is well-advised to concentrate on learning how to obtain a reliable history and how to do a good behavioral examination by ordinary methods", and many beginners will be indebted to him for the help afforded by this manual.

ROBERT W WHITE

Harvard University